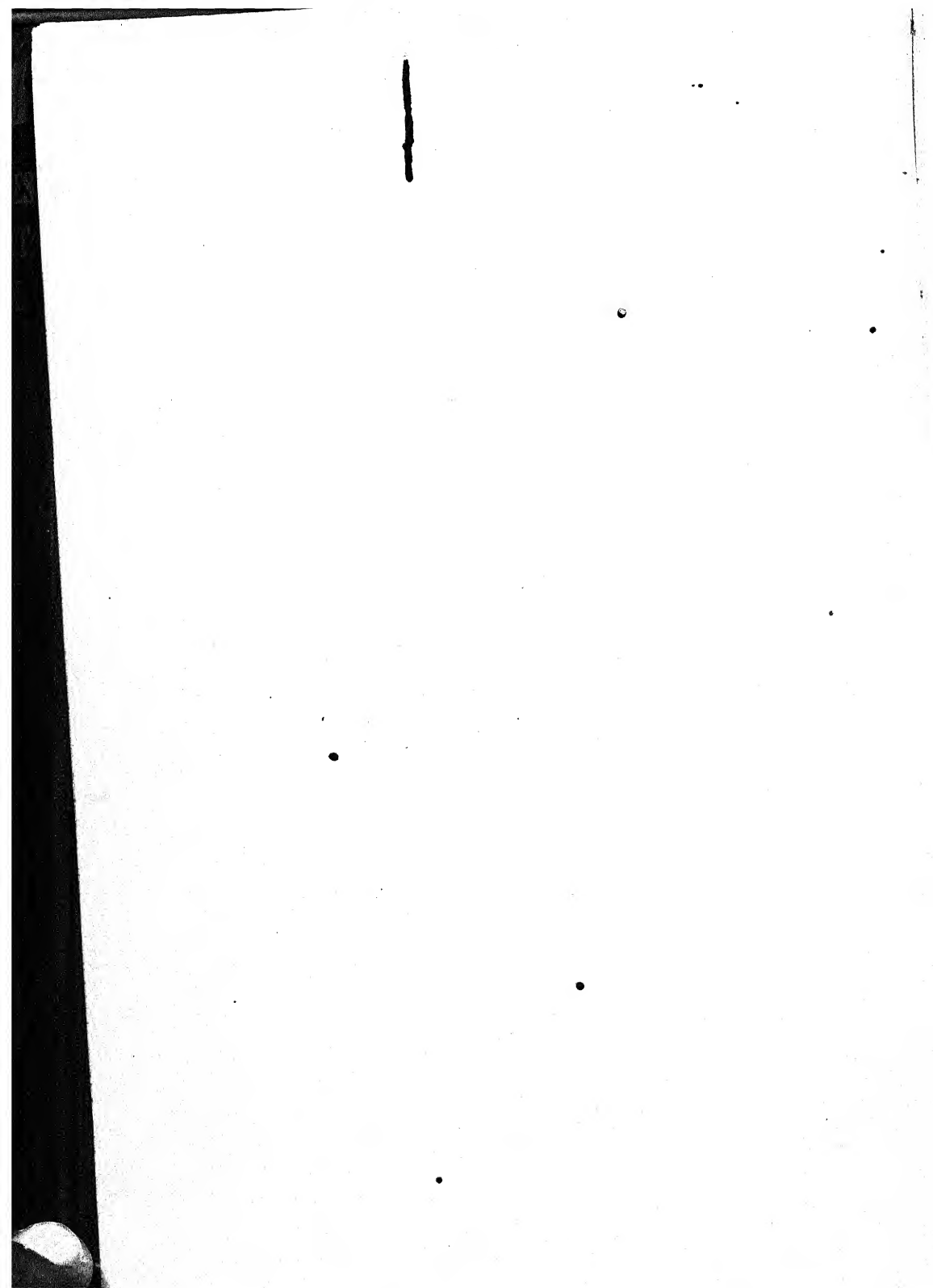


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THE FINANCIAL HISTORY OF BOSTON

FROM MAY 1, 1822, TO JANUARY 31, 1909

BY

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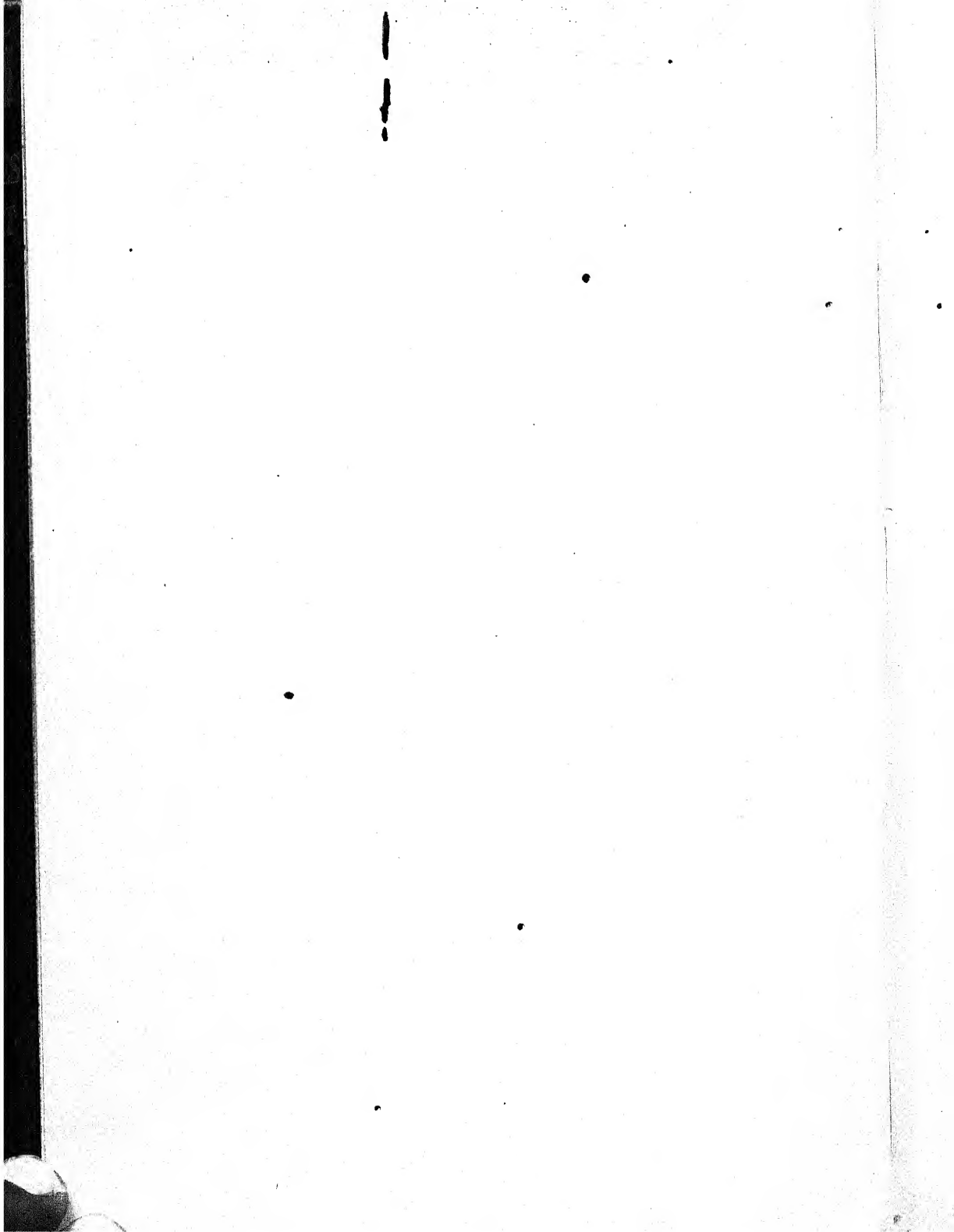


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TO
MY WIFE



PREFACE

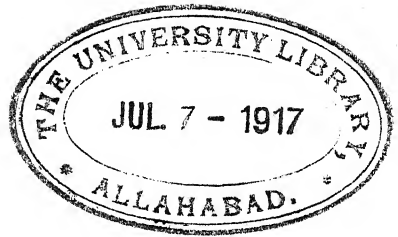
THIS history covers the period from May 1, 1822, when the first city government of Boston was organized, to January 31, 1909, the end of the fiscal year 1908-09. Though the fiscal year never coincided with the calendar year, the author, for the sake of simplicity, refers in this book to a given fiscal year by the calendar year in which it began. For example, the fiscal year 1822-23 is referred to as 1822. He has followed the practice of the city auditor in using the terms receipts and expenditures throughout the book. The figures given are cash transactions; Boston does not keep her accounts to show accruals.

The author wishes to acknowledge his indebtedness to those who have helped him in the preparation of this book. First of all, he would record his gratitude to Boston herself for the rich opportunities she laid before a college lad. The inspiration of her historic scenes and the enjoyment of her many institutions, endowed by public or private munificence, stimulated him to learn of the men and the policies that had made possible such a heritage. And so, if in these pages there be found anything of interest to the student of the city's past or of profit to the citizen shaping its future, the author will feel that in some measure the debt of the lad has been repaid.

Throughout the work, the author has had the invaluable guidance of his teacher, Professor Charles J. Bullock. For his help in the preparation of this book and in many other ways, as well, his student is deeply grateful. Information has generously been given by Hon. John A. Sullivan, corporation counsel; Dr. E. M. Hartwell, secretary of the statistics department; Mr. R. M. Hull, assistant secretary of the finance commission of 1907; and Mr. H. G. Ide of the treasury department. The task of the author has been lightened by the assistance of his good friends, Drs. Augustus Locke and F. A. Golder. To his wife, who in many ways has aided him, he is under the greatest obligations.

CHARLES PHILLIPS HUSE.

BOSTON UNIVERSITY,
June, 1915.



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THE FINANCIAL HISTORY
OF BOSTON

THE FINANCIAL HISTORY OF BOSTON

• CHAPTER I

INTRODUCTION. THE WINNING OF THE CHARTER

IN 1821, the last year under the selectmen, Boston was an overgrown seaport town of forty-five thousand people, her inhabitants being confined almost entirely within what is now the business part of the city, that is, between Beacon Hill and the water front. In 1908 her population was six hundred and fifty thousand, and the simple town government with its few requirements had developed into a complex municipal system with many wants.

The expenditures of Boston in 1821 were about \$200,000, a per capita charge of approximately \$4; by 1859 they had risen to \$3,500,000, a per capita expenditure of almost \$20; in 1873, only fourteen years later, they were \$18,000,000, or \$65 for each inhabitant; and in 1908 they were \$30,000,000, a per capita burden of \$45.¹ It is the purpose of this book to trace the growth of the city's needs during these eighty-seven years under the charter and to show how she met them.

From 1630 to the end of the Revolution the growth of the town had been very slow. During the seventeenth century the population never exceeded seven thousand; its highest point in the eighteenth century previous to the Revolution was reached in 1740 at seventeen thousand. During the early years of the struggle for independence the town suffered severely; and it is said that there were only three thousand of the inhabitants who stood by their homes during the siege.² Peace brought a revival

¹ These figures of expenditure do not include sinking fund payments or the state tax. They are for the fiscal years 1821-22, 1859-60 etc. The figure for 1821, as well as for the later years, includes the expenditures of Suffolk County.

² *Report* to the Committee of the City Council, appointed to obtain a census of Boston for the year 1845.

of commerce, especially in the coasting trade, and also made Boston more important as a market for the growing manufactures of New England. Consequently, her population increased rapidly after the Revolution, passing before 1790 the record figure in the days of her old prosperity. By 1800 the town had 25,000 inhabitants; in 1810, 33,000; and in 1820, 43,000. In common with other cities, Boston was enjoying the phenomenal growth of the nineteenth century.

During this whole period, extreme economy characterized the financial policy of the town. Only the most indispensable needs, such as education, poor relief and highways, were attended to. Taxation, even though self-imposed, was unpleasant; and the idea of debt was abhorrent. When the town had to raise considerable sums for extraordinary purposes, such as the erection of an almshouse, the rich were invited to contribute, and not in vain.¹ It is interesting to watch the transition from the narrow economy of the town to the extreme liberality of the city, and to note the gradual breaking down of the prejudice against debt. Under the selectmen Boston had no permanent debt; whenever debts were incurred, the town sought to cancel them as quickly as possible. Thus, in 1814, Boston promptly provided for the repayment out of taxes in six annual instalments of a temporary debt of \$70,000, contracted during the war.² For the last ten years of town government, in fact, a higher tax rate was levied than during the first decade of city government.

During the Revolution the town meetings frequently assumed national importance. Local questions were for the time forgotten, and men and money were voted freely to the cause.³ It is probable that the close association of the town gathering with those stirring days explains the tenacity with which many of the older citizens clung to an antiquated system long after the growth of Boston demanded a change.

The experience of Boston reveals the defects of town government when applied to large units. Boston had practically the same form of government as that in existence in "towns" of the

¹ Quincy, *Municipal History*, pp. 17-19.

³ Quincy, *Municipal History*, p. 19.

² *Auditor's Report* (1814), p. 3.

present day, except that the local unit was more independent of the control of the state than at present. All important business, the election of officers, the passing of by-laws, and the voting of the budget, was done in town meeting, in which nominally all voters could participate. This worked very well as long as the town was small, but by 1820 it was impossible to assemble the seven thousand voters for the town gathering.¹

The town government had three important defects. First, the voters had to a considerable extent lost control over the executive department. In the very early days all business was transacted by the voters, but as population increased, certain persons, called the selectmen, were chosen "to order the affairs of the town." They, with other officers and boards, appointed as the duties increased, did the executive work of the town.² By the nineteenth century the budget, prepared by the committee of finance, consisting of the board of selectmen, the overseers of the poor, and the board of health, would often be approved by the town meeting though only voters in the immediate vicinity of the desk knew what was being done. The anomaly was often seen of taxes and appropriations being voted by practically the same persons that had prepared the estimates. They, moreover, as members of the various boards were to have the spending of the money.³ Had it not been for the remarkable integrity of these early public servants, a change in the system would have been required long before 1822. Charles Bulfinch, the architect, who from 1800 to 1815 was selectman and chairman of the committee of finance, was a good example of these public spirited citizens who devoted much of their time to the affairs of Boston.

The second defect was the lack of unity in the executive department itself. The three boards composing the committee of finance divided the executive power and asserted independence, each in a province not clearly defined. Each could make contracts, and even borrow money, in many cases without consulting the other two or without a previous vote of the town.⁴ Such a loose organization could not be expected to carry out the consis-

¹ *Memorial History*, iii, p. 221.

² *Ibid.*, p. 218.

³ Quincy, *Municipal History*, pp. 28, 29.

⁴ *Ibid.*, p. 29.

tent, progressive policy that the growing commercial importance of Boston demanded. What was needed was centralization of power and responsibility. This need was not entirely met by the act of incorporation.

The third defect, and the one that was universally recognized, was the relation of the town to the county. The County of Suffolk included Boston and Chelsea, the latter a very small town in 1822. Its affairs, administrative and financial, were conducted by the various justices of the peace, sitting together as a court of sessions. In the early colonial days this court had exercised only judicial functions, but by the Revolutionary period it had in its hands all the administrative business of the county as well. This mingling of administrative and judicial functions usually resulted in the poor execution of both. In 1804, in response to a universal demand throughout the commonwealth, the criminal jurisdiction of the court was taken away, leaving to the justices acting separately their jurisdiction in minor criminal matters as before.¹

This change did not mend matters much, so far at least as the people of Boston were concerned. The exercise of their minor jurisdiction by the justices continued lax. Moreover, to be taxed by this same body of men, over whom the citizens had no control, was a cause of constant friction. Clashes were frequent between town and county authorities on such matters as the building of highways, the repairing of the county institutions or the licensing of innkeepers. Though the citizens of Boston had to pay practically the whole of the county tax, amounting to twenty or thirty thousand dollars annually, about one-sixth of the total requisition, they were unable to control the expenditure of this money within the very limits of the city. And since it was clear that the town government was not competent to take over county affairs, the movement for control of county expenditures naturally gave greater force to the demand for municipal government. But the act of incorporation, as we shall see, did not wholly remedy this troublesome question.

Agitation for municipal government began with the return of prosperity after the Revolution. In 1784, 1785, 1791, 1804, and

¹ Sprague, *City Government in Boston*, pp. 29-31.

1815 the question was brought before the citizens, each time to better purpose, until in 1822 it was settled in the affirmative.¹ Success was due in part to the fact that the constitutional convention of 1820 removed the ground for the objection that the legislature had no right to incorporate a city, since nothing was said of such power in the state constitution. It was also due to the fact that the legislature made the abolition of the court of sessions and the transfer of most of its functions to Boston dependent on the acceptance of a charter.

The incorporation did not increase the powers of Boston except in regard to county administration; it merely changed the method of using these powers.² Instead of conducting their business in town meeting, the voters now elected annually a city council to exercise legislative power. There were two boards, the mayor and eight aldermen, elected at large, and the common council, which had forty-eight members, four being chosen from each of the twelve wards. Each branch of the city council had a negative upon the other in legislation. Executive functions were intrusted to the "Board of Mayor and Aldermen," an arrangement that proved to be a source of weakness.³

The charter of 1822 gave the mayor but limited power. He had no veto, but as chairman of the board of aldermen could vote in that body. The mayors, however, were personally strong men, and their opinions on any subject commanded great respect. Moreover, the charter intrusted the mayor with the "administration of all the fiscal, prudential, and municipal concerns" of the city.⁴ These words the second mayor, Josiah Quincy, interpreted literally. He obtained no little executive unity by placing himself at the head of almost every important committee.⁵ This custom was kept up by his successors until the charter revision of 1854 placed the mayor outside the board of aldermen. He was given in exchange the power of veto, which by express provision did not extend to the executive business of the aldermen.⁶ It

¹ Quincy, *Municipal History*, pp. 23-33.

² *Special Laws*, v, p. 504 (ch. 110 of 1821).

³ Sprague, *City Government in Boston*, p. 32.

⁴ *Special Laws*, v, p. 505.

⁵ Quincy, *Municipal History*, p. 123.

⁶ *Special Laws*, x, p. 254 (ch. 448 of 1854).

was not until the revision of 1885 that executive power was given the mayor.¹

But not all executive power was in the board of mayor and aldermen, where, as we have seen, the mayor was able to secure a degree of unity. Three of the town boards, elected by the voters, were retained by the charter, the fire-wards, the school committee and the overseers of the poor. It was the overseers of the poor who gave the most trouble, since they enjoyed the right to make expenditures independent of the city council.² Though frequent attempts were made by the council to abolish this board, legislation could not be secured until 1864.³

A further annoyance to the city arose from its relation to the County of Suffolk. At the time of incorporation the court of sessions was abolished,⁴ some of its functions being transferred to the mayor and aldermen. The remainder of its powers, however, including the right to expend money for the courts and for the maintenance of prisoners, was given to officers of the county courts. These officers could draw without limit upon the treasury of the city, since Boston had agreed to assume all the expenditures of Suffolk County. Chelsea, the only other town in the county, was to enjoy all county privileges without paying as formerly its share of the taxes. Later the town gave up to the city its title to county property.⁵

Boston did not regret its bargain as long as Chelsea remained a village, but, when the growing town demanded larger and larger expenditures, the city naturally grumbled at the burden. Great dissatisfaction was caused in the fifties by an act which transferred certain powers over Chelsea, formerly exercised by the mayor and aldermen of Boston, to the county commissioners of Middlesex, but reserved to Boston the privilege of paying the bills.⁶

The rapid growth of the town after 1783 was outstripped by that of the city in the years following its incorporation. The population rose from 43,298 in 1820 to 61,392 in 1830, this increase of

¹ Sprague, *City Government in Boston*, p. 40.

² *Mayors' Inaugurals*, i, p. 41 (1825). ³ *Memorial History*, iii, pp. 271, 272.

⁴ *Special Laws*, v, p. 500 (ch. 109 of 1821).

⁵ *Ibid.*, vii, p. 146 (ch. 65 of 1831). ⁶ *Mayors' Inaugurals*, ii, p. 115 (1856).

41 per cent being far greater than that in any preceding decade. The rate of growth increased to 50 per cent in the thirties, the census of 1840 giving a population of 98,383. In 1850 after a decade of European immigration Boston had a population of 136,881, an increase of 47 per cent over 1840. With the fifties the stream of immigration, both from the country and from abroad, slackened. The census figure of 177,840 for 1860 records an increase of only 30 per cent. The annexations after the Civil War are partly responsible for the more rapid increase during the next two decades, the population being 250,526 in 1870 and 362,839 in 1880. The rates of increase for these decades were 40 per cent and 44 per cent, respectively. During the eighties population advanced 23 per cent, being 448,477 in 1890; and in the nineties, 25 per cent, being 560,892 in 1900.

The problem of meeting the demands of this growing population has been no small one. The members of the early councils felt that the future of the city rested with them. The rapid development of manufactures in New England after 1820, the building of railroads in the thirties, and the increased use of the port of Boston in the forties stimulated these public servants to make provision for the needs of the city.

The financial history of the city of Boston may be divided into five periods. The first, from 1822 to 1844, saw the shattering of the old ideals of economy, the introduction of new conveniences and the establishment of a permanent debt. The second period, from 1845 to 1859, gave Boston her water system. The third period, from 1860 to 1873, saw the greatest growth of expenditures. In this period the city was called upon to aid the Union, to make great land and street improvements and to equip the territory gained by annexation. The fourth period, from 1874 to 1886, was marked by retrenchment. Outside of establishing a park system, these years were restricted to the completion of works already planned. The last period, from 1887 to 1908, saw an increase in legislative control. Its principal tasks were to provide rapid transit and to supply the constant demand for new streets and new schoolhouses. The period also saw the creation of the metropolitan water, sewer, and park systems.

In each of these periods we shall outline the government of Boston in order to show its influence on the city's finances. We shall study in detail the movement of expenditures, receipts, and debt. The financial policies of the successive administrations will also receive attention. In judging these policies we must remember the imperfections of the charters which hampered good government, and the magnitude of the problems which Boston has been called upon to solve.

CHAPTER II

FROM TOWN TO CITY ECONOMY, 1822-1844

GOVERNMENT

THE charter of 1822 placed the legislative powers of the city, including those of appropriating money and levying taxes, in the two branches of the city council. These powers were to be exercised by concurrent vote. Although the general court reserved the privilege of legislating for Boston, this power was not exercised, except upon petition from the city, until a later period. Consequently, many important changes, that would now require special acts, were then made by ordinances of the city council.

The charter did not provide for complete separation of powers. Administrative, as well as legislative functions, were vested in the board of mayor and aldermen. Three independent boards, however, survived, namely, the firewards, the school committee and the overseers of the poor, holding executive control over their own departments. The charter gave the mayor little power; he had no veto; his appointments were subject to confirmation by the aldermen. As chairman of the upper branch of the city council he could, however, wield a certain amount of power, varying with the man. Since executive control fell largely into the hands of committees, the mayor was forced to name himself chairman of the more important ones, in order to secure a degree of executive harmony.

Naturally, the common council was jealous of the administrative power enjoyed by the upper chamber. As time went on, the council induced the aldermen to create joint executive committees. Until 1885 these did the bulk of administrative work. In its passion for executive work, the real function of the common council as a legislative chamber was neglected.¹

¹ Ernst, *Constitutional History*, p. 110.

The system which commingled legislative and administrative powers has been rightly condemned. Corruption was only prevented, when the same men appropriated as well as expended, by the integrity of the early officials. The complete breakdown of an unpaid board of aldermen, overburdened with executive work, was only avoided because of the ability and zeal of these public servants.

EXPENDITURES

In following the expenditures of Boston, we shall see the transformation of a simple municipal machine with a few loosely-assembled parts into a complex system with many branches. The scheme chosen for classifying expenditures was that used by the Boston Department of Statistics for the years 1870 to 1899.¹ Inasmuch as departmental organization has changed considerably in the course of eighty-seven years, the figures for the various branches do not correspond in every case with those of the departments which bear the same names. The scheme follows functions, rather than departments. By keeping the same items under the same branch from 1822 to 1908, comparisons have been made possible. The figures given in this book are taken from the auditor's reports and are those of cash payments. Boston does not keep her accounts to show accruals.

In reviewing these figures, we see the effects of a resistless force, which has pushed upward all expenditures. Abrupt changes in the continuity of the growth record extraordinary events. The explanation of these must chiefly concern us.

In the period 1822 to 1844 we find two distinct financial cycles. Each is made up of a period of great activity and a consequent period of rest. In the first cycle, which lasted from 1822 to 1831, the influence of the new government is plainly seen. Expendi-

¹ My figures for 1870 to 1899 do not correspond exactly with those of the Statistics Department, found in *Special Publication, No. 5*. For the purpose of making a study in greater detail than their figures would permit, I was obliged to follow the same method employed for other years — of compiling my totals from the great number of small items in the auditor's reports. Since it could not be ascertained to what branch the Statistics Department had assigned every item, it was impossible to arrive at the same totals.

tures rose from \$186,700 in 1821, the last year under the selectmen, to \$376,126 in 1826, exclusive of the \$608,000 spent that year in the Faneuil Hall extension. After the great improvements accomplished by Mayor Quincy the government rested, expenditures declining to \$330,807 in 1831. The second cycle, which opened in 1832 with expenditures of \$506,294 and ended in 1844 with expenditures of \$765,804, reflects the great prosperity of the early thirties and the depression following the panic of 1837. The crest of the upward movement was reached in 1836 with an expenditure of \$816,913. The amount expended in 1837 fell to \$695,552. The financial storm broke sufficiently early in 1837 to permit a curtailment in the appropriations for that year. With the exception of 1839, when expenditures reached \$841,028, the remaining years of the cycle show retrenchment.

Though the increase of expenditures was not steady, every financial cycle brought them to a higher level. In this period of twenty-three years they advanced from \$186,700 in 1821 to \$330,807 in 1831 and \$765,804 in 1844, an increase of over 300 per cent. The per capita increase was from about \$4 to \$7. A study of the various branches of expenditure will explain the causes of this growth.

General Government. Expenditures for general government include payments which cannot be charged to a single department. The salaries of city officials, the expenditure for printing and stationery and the maintenance of public buildings are the chief ordinary charges. Appropriations for new buildings constitute the extraordinary items.

The change from town to city which increased most branches of expenditure, especially affected this branch. From an average of \$11,751 for the years 1818 to 1821 expenditures for general government rose to \$36,745 for the years 1828 to 1831. In the former period they comprised 7.4 per cent of the total expenditures, in the latter, 13 per cent. This increase was due to the larger paid staff required by city government. But after this initial expenditure the branch lost in importance; for the years 1840 to 1843 it constituted but $8\frac{1}{2}$ per cent of the city's expenditures.

The chief ordinary expenditure was salaries. The city charter created several new offices, and, as time went on, others were added, especially in the later thirties and early forties. Salaries rose from \$24,875 in 1825 to \$36,365 in 1839 and \$37,176 in 1844.

The growth of salaries was caused not only by the creation of new offices but also by increases in the remuneration of individuals. Advances in the salaries of individuals were unimportant until the forties. After 1840 the city council raised the pay of one official after another. This advance, which was very gradual, was part of a general movement in all municipal departments to make salaries keep pace with an alleged increase in the cost of living. By the early fifties the phenomenon of rising prices had been clearly recognized by the city council.

The following table shows the movement in certain selected salaries prior to 1860.

	1822	1829	1840	1849	1859
Mayor	\$2,500	\$2,500	\$2,500	\$2,500	\$4,000
Treasurer	2,000	2,000	1,800	2,200	3,250
City Clerk	1,500	1,500	1,500	2,000	2,500
Auditor .....	....	1,200	1,500	2,000	2,500
Clerk of Common Council ...	....	800	800	900	1,300
Assessors	1,000	1,000	1,200	1,300	1,600
Chief of Police .....	....	1,000	1,000	1,800	2,200
Superintendent of Streets....	....	1,000	1,100	1,400	1,700
Total	\$7,000	\$11,000	\$11,400	\$14,100	\$19,050

The totals of these salaries, practically stationary from 1829 to 1840, rose from \$11,400 in the latter year to \$14,100 in 1849 and to \$19,050 in 1859. This means an increase of 24 per cent in the forties and of 35 per cent in the fifties, or of 73 per cent for the thirty-year period.

Included in the scanty equipment which the town turned over to the city, were two partly-constructed edifices, a courthouse and a jail. The completion of these structures in the years 1822 to 1824 at a cost of about \$75,000 gives us the first extraordinary expenditure for general government. In 1827 \$7,550 was spent in refitting Faneuil Hall after the removal of the market from its lower floor to the new Quincy Market. In 1830 \$25,000 was

expended in making over the old State House into a city hall. Since the removal of the legislature to Beacon Hill, the old State House had been cut up into apartments and leased. It was now decided to use the second floor for municipal purposes and to rent the lower floor.¹ From 1833 to 1836 the city was engaged in building a new courthouse at a total cost of \$175,510.

In 1839 \$28,692 was expended for a fire-proof building for the registry of probate and deeds. Since 1824 the registry had been in the old county court house. This was erected in 1809 by Bulfinch and used for the county courts until the completion of the new court house in 1824. This work of Bulfinch, at first condemned as faulty in construction, was later found to be very substantial. Mayor Chapman persuaded the city council to defer plans for a new city hall, and to refit the old court house for that purpose. The change was accomplished in 1840 at the very modest expenditure of \$14,362. All the city offices, formerly in Faneuil Hall and the old State House, could now be gathered under one roof. The gain in efficiency was considerable.² In 1841 \$15,958 was spent in cutting a passageway at the end of the city hall.

Police. In the last years of the town the cost of police protection was but \$9,000 or 5.6 per cent of the town's expenditures. Of all the departments in existence before 1822, the police was the last to respond to the new order. An expenditure of \$12,527 in 1832 shows only a slight increase over police expenditures previous to the incorporation. They constituted in the years 1828 to 1831 but 4.1 per cent of the total expenditure. In 1833, however, police expenditure suddenly leaped to \$21,116. By the early forties it made up 8.5 per cent of the total expenditure.

The history of the department goes back into the life of the town. To insure "safety and good order," the selectmen appointed annually two classes of police, the watchmen and the constables.³ The former were by far the more important. In 1820, of a total police expenditure of \$8,768, only \$523 was spent

¹ *Mayors' Inaugurals*, i, p. 133 (City Hall Address, 1830).

² *Ibid.*, ii, pp. 3-8 (City Hall Address, 1841), and *Ibid.*, i, pp. 267-269 (1841).

³ *Special Laws*, ii, p. 469 (January 29, 1802).

for constables. The watchmen patrolled the town at night, pacing the dimly lighted streets with rattles and lanterns. The whole watch was under a captain. Each of its several "divisions" was led by a "constable of the watch." There were never more than eighteen men on duty at the same time under the town or during the first ten years of city government.¹ The leaders received \$1; the men, \$0.90, for every night on duty.

The constables of the town were not always on regular duty. A town the size of Boston, with a population almost entirely native, ordinarily required no protection during the day. Only at night was the need felt. Though the constables could be called upon for special police purposes, their chief duties were the serving of civil processes.²

The incorporation made no change in the organization of the police. The charter simply transferred the power of appointment from the selectmen to the mayor and aldermen.

The new régime failed to stimulate police expenditure. The per capita payment stood at about \$0.20 from 1822 to 1832. In spite of its small size, the department did effective work under Mayor Quincy. Without adding a single man to the old town force, he brought the haunts of crime under better control than Boston had known for years. He accomplished the purification of West Boston or "the Hill."³ Police efficiency, however, was due, more to the remarkable ability of the great Mayor than to the adequacy of the department.

By 1833 it was generally acknowledged that an increase in the number of the watch was necessary. The population had now grown to over 70,000. In his inaugural for 1833 Mayor Wells recommended to the city council that the watch be sent on duty earlier in the evening.⁴ This recommendation was adopted. An increase was also made in the number of the watch. The expenditures of the watch rose from \$11,000 in 1832 to \$27,000 in 1834.

A larger police force was especially needed to deal with the problem of Irish immigration which first became important in the

¹ Quincy, *Municipal History*, p. 109.

³ Quincy, *Municipal History*, p. 109.

² *Special Laws*, iii, p. 5 (June 18, 1803).

⁴ *Mayors' Inaugurals*, i, p. 169 (1833).

thirties. The settlement of these strangers in the midst of the native population led to much friction. There is no evidence that the foreigners were more criminal than the native population. But the placing together of the native and the foreigner was in those early days like the putting of flint to tinder. The difference in religion was a very important source of trouble. Only with the passing of time has the native American become accustomed to the influx of all kinds of people. Happily for Boston, this race feeling lost its greatest force with the decade which saw it rise.

The effect of immigration upon police expenditure may be seen in the reports of the auditor. In his report for 1834, page 36, we read: "paid for services of Constables specially employed to prevent an anticipated riot, in August, 1834, \$1,561.15." This refers to the disturbances incident to the destruction of the Ursuline convent on Winter Hill, Somerville, the night of August 11th. The mob planned a triumphant return the next day. The Irish naturally made ready for its arrival, giving Mayor Theodore Lyman, Jr. excellent grounds for anticipating a riot. Realizing the inadequacy of the police force, the Mayor resorted to a clever ruse. He stationed a mounted courier on the Boston side of the bridge. As soon as the head of the procession came upon him, the horseman dashed off. At once the cry arose, "He is going for the military!" The column scattered in all directions.¹

On the same page we find this item: "for the preservation of the peace, in and about Ann and Broad streets and on the Hill, at the West part of the City, \$1,153.00." The significance of this passage is understood when we learn that Ann and Broad Streets were in the Irish section. This district called for special constable service for several successive years.

On Sunday, June 11, 1837 there occurred an incident which was the direct cause of change in both the fire and police departments. This was the Broad Street riot which grew out of a collision between a fire engine company and an Irish funeral procession. As in the case of the disturbance of 1834, order was

¹ *Memorial History*, iii, p. 240.

restored only by resorting to extraordinary means. A company of mounted militia happened to be in the city. Mayor Eliot put himself at their head and dashed into Broad Street. In time peace was restored.

This riot made clear to the city council the need of a larger and better-organized police force.¹ In his inaugural for 1838 Mayor Eliot recommended the appointment of officers for police duty only, in place of the constables. The same year legislative authority was obtained.² The new officers, appointed by the mayor and aldermen, were placed under the control of the city marshal. This was the beginning of a permanent force of day policemen in Boston. Though small at first, the police department increased gradually through the rest of the period.

The years 1840 to 1844 were years of rest in all branches of city activity. Police expenditure rose slowly from \$45,602 in 1839 to \$57,667 in 1844.

Fire. The expenditure for fire protection was much more important under the city than under the town. It rose from only 1.1 per cent of the total expenditure for the years 1818 to 1821 to 6.2 per cent in the period 1828 to 1831. In the period 1840 to 1843 it was 6.6 per cent.

Protection was obtained under the town by a system of loosely-organized, volunteer fire companies which combined work with play. Their equipment, consisting chiefly of engines, ladders, hooks and buckets, was furnished by the town. In addition, the town appropriated a small sum in premiums and allowances which provided the companies with quarterly dinners. Members were exempt from militia and jury duty. These privileges, with the distinction conferred by membership, served to provide the volunteer system with a sufficient number of men.³

The companies were controlled by a board of firewards, elected by the voters. The firewards enforced by-laws relating to such matters as the construction of buildings and the storing of powder.⁴ They also directed the companies in the fighting of

¹ *Memorial History*, iii, pp. 243-246.

² *Special Laws*, viii, p. 52 (ch. 123 of 1838).

³ Quincy, *Municipal History*, pp. 153, 154.

⁴ *Special Laws*, ii, p. 465 (June 19, 1801).

fires. They had power to order any citizen, under penalty of a fine, to assist in the bucket line which stretched from the nearest stream or well to the engine.¹

A volunteer system was likely to work well in a small town, where the spirit of participation in public affairs prevailed, and where the lack of congestion made fire fighting less difficult. With the growth of the town, however, individual interest decreased, while the danger of fire increased. Although conditions demanded a change before 1822, the task of sweeping away the antiquated system was left to the city.

The charter of 1822 did not change the old system. It merely stipulated that the firewards should be elected by the voters, at least three from each ward.² This minimum the city council deemed adequate. Difficulties at once arose, not only because this board of thirty-six had no single head, but also because their independent position enabled the firewards to antagonize the city council.

The same spirit of independence asserted itself in the ancient volunteer organizations. They would neither submit to discipline nor adopt such cowardly equipment as the hose. In 1823 the companies demanded more dinner money. When the city council refused, they one and all deserted their engines in a single day.³ Mayor Quincy that very day organized new volunteer companies.

With the protection of the city assured, the Mayor turned his attention to the complete reorganization of the department. He sent George Darracott, a former fireward, to study the methods used by New York and Philadelphia. Mr. Darracott reported in favor of a hose system and of reorganization under the command of a single chief.⁴ An act, embodying these suggestions, passed the legislature on the 18th of June, 1825, and was soon after adopted by the voters in a close contest. The law abolished the board of firewards, transferring its powers to a chief engineer and assistant engineers. They were to be appointed by the

¹ *Memorial History*, iii, p. 229.

² *Special Laws*, v, p. 512 (ch. 110 of 1821, sec. 19).

³ *Memorial History*, iii, p. 230.

⁴ Quincy, *Municipal History*, p. 181.

mayor and aldermen, with the concurrence of the common council.¹

In April, 1826, the firewards went out of office, and Samuel D. Harris was appointed chief engineer. Aside from his efficient work in building up the department, the first chief is to be remembered for his refusal to accept a salary. He gave as a reason for this action his belief that the companies, which still served without recompense, would follow more willingly an unpaid leader.² The insurance companies showed their confidence in the department by granting substantial reductions in rates.³

A glance at the table, given on page 356 of the appendix, reveals the thoroughness of the reorganization. The first column which is called "Payments for the fire department proper" contains such expenditures as the cost of equipment and repairs, the annual allowance to the companies and the payment of premiums according to an elaborate system established in 1825. Its increase in 1825 and 1826 reflects the extensive purchase of new engines, hose, buckets and other supplies for the use of the department, at this time twelve hundred strong.⁴ This increase in fire apparatus was accompanied by the erection of adequate engine houses and the building of a system of reservoirs throughout the city, as the second and third columns indicate. The figures in both these columns represent largely extraordinary expenditure. The city let scarcely a year go by without adding to the plant. The sum paid for rented engine houses, though at first considerable, decreased annually from this time on. Under the town the department had no storage reservoirs to draw upon in case of fire. The first appropriations for reservoirs in 1825 were the direct result of several disastrous fires, one of which in April of that year destroyed property to the value of a half-million dollars.⁵

After the reorganization under Mayor Quincy the expenditure for fire protection, in common with almost all branches of ex-

¹ *Special Laws*, vi, p. 360 (ch. 52 of 1825).

² Quincy, *Municipal History*, p. 255.

³ *Mayors' Inaugurals*, i, p. 81 (1828).

⁴ Quincy, *Municipal History*, pp. 253, 254.

⁵ *Ibid.*, p. 160.

penditure declined. No unusual amounts were spent until 1836 when appropriations for new engine houses and reservoirs carried expenditures from \$25,014 in 1835 to \$49,849 in 1836. Expenditure was kept at this new level by the reorganization of the department in 1837.

Mayor Eliot was led to this act as a result of the Broad Street riot. He believed that discipline could be better maintained with a small force of paid members, who were to be called from their regular work in case of fire. The city council made the change by an ordinance which went into effect September 1, 1837. That the new system was obnoxious to some, is shown by the fact that for several weeks it was necessary to protect the city from incendiaries.¹

This improvement, though justified by the new conditions of city life, cost Boston \$34,598 for salaries in 1838.² In 1836 the annual allowance to the companies had been but \$2,500.³ The individual wages were small, ranging until 1845 from \$150 per annum for the assistant engineers to \$65 for the "privates."⁴ The salary of the chief engineer was established in 1830 at \$1,000.⁵

Institutions. Expenditures for institutions include all the expenditures for charitable and correctional purposes. During this period such work was done by the overseers of the poor, the house of industry, the house of reformation, the house of correction, and the lunatic hospital.⁶ Down to 1841 the ordinary expenditure of the house of correction was placed under county appropriations.

Care of the poor was always one of the primary concerns of the town, ranking with expenditures for streets and schools in importance. The system of out-door relief was the usual method. This led in seasons of distress to very large disbursements. For example, the expenditure rose from \$12,490 in 1818 to \$32,578 in 1819, followed by a decline to \$18,784 in 1820. This branch lost in relative importance with the change from town to city. From 1818 to 1821 institutions demanded 16.3 per cent of the total

¹ *Memorial History*, iii, p. 246.

² *Auditor's Report* (1838), p. 35.

³ *Ibid.* (1836), p. 35.

⁴ *Auditor's Report*.

⁵ Quincy, *Municipal History*, p. 291.

⁶ See Appendix, p. 358.

annual expenditure, whereas in the periods 1828 to 1831 and 1840 to 1843 they called for 13.6 per cent and 13.8 per cent, respectively.

Though much money was spent annually for the poor of the town, it was not expended in a way that gave satisfactory results. In addition to out-door relief, the town provided a very inadequate almshouse. Here were gathered, without much separation, the worthy poor, as well as the vicious and the vagrant.¹

The general prevalence of such conditions led in 1820 to a demand throughout the commonwealth for a reform in the system of poor relief. A special committee of the legislature published the result of its investigations. Boston also appointed a committee to examine the subject. Josiah Quincy, who served as chairman of both committees, led the movement. The legislative committee condemned out-door relief as wasteful and recommended the erection of houses of industry, where the able-bodied should be kept busy, preferably in agricultural pursuits.² As a result of this agitation, the town government in its very last year appropriated \$41,000 for a house of industry.³

Sixty-three acres of land were purchased in South Boston at \$100 an acre. The owner, Mr. Samuel Brown, though subsequently offered \$500 an acre for his land, kept his word to the town. The house of industry, begun under the town, was turned over to the city in September, 1822, by the committee in charge of its construction. Its cost was \$40,100. In December an appropriation of \$5,000 was made for furnishing the structure. In June, 1823, when the building was finally ready, its occupancy was delayed by a most curious situation.⁴

The control of all poor relief under the town had been in the hands of the overseers of the poor, who were elected by the voters. The city charter which gave the board of mayor and aldermen control over almost all branches of expenditure failed to do so in the case of this branch. The city council, therefore, sought to limit the independence of the overseers. In February, 1823, a

¹ Quincy, *Municipal History*, p. 34.

² *Memorial History*, iii, p. 230; Quincy, *Municipal History*, pp. 35-37.

³ *Auditor's Report* (1822), p. 14. ⁴ Quincy, *Municipal History*, pp. 37-40.

special act was secured, giving the council power to appoint annually "nine discreet and suitable citizens, to be directors of the house of industry."¹ When the newly-appointed directors invited the overseers to transfer the paupers to South Boston, they refused. They finally consented, however, to the discharge of a small number of able-bodied poor. Not all of these could be prevailed upon by the directors to give up their recently-acquired liberty and embark for South Boston.² It was not until 1825 that the overseers relinquished their last hold upon indoor relief. In the struggle they came very near being shorn of all their powers.³ The restriction of their province to outdoor relief is seen in the falling off of the expenditure of the overseers in 1825 and the rising of the expenditure for the house of industry in the same year.

The erection of the house of industry at South Boston was followed in 1824 by the building of a house of correction on the same tract of land.⁴ This institution, the inmates of which were set at work, usually at pounding stone, was first given temporary quarters in 1823 by Mayor Quincy in the jail yard on Leverett Street.⁵ When the South Boston home was finished, at a cost of \$45,000, it was permitted to lie idle for over a year, so well had the old building in the jail yard served its purpose. Moreover, the city debt was rising, and further appropriations were needed to prepare the structure for occupancy. Finally, a new use was found for part of the house, when in 1826 the city council authorized the fitting up of the east wing as a house of reformation for juvenile offenders. This new institution was placed under the management of the directors of the house of industry.⁶ Its success in reforming the youth intrusted to its care amply justified the moderate expenditure required.⁷

After these extraordinary expenditures incurred under Mayor Quincy, expenditures during the next few years were confined to

¹ *Special Laws*, vi, p. 40 (ch. 56 of 1822).

² Quincy, *Municipal History*, pp. 88-91.

³ *Ibid.*, p. 145.

⁴ *Special Laws*, vi, p. 211 (ch. 28 of 1824).

⁵ *Memorial History*, iii, p. 230.

⁶ *Special Laws*, vi, p. 464 (ch. 182 of 1825).

⁷ See "Report of Directors" in *City Documents*, no. 8 (1838).

the supplying of ordinary demands. Beginning with 1832, however, appropriations were at last made to equip the house of correction at South Boston. The growth of this institution necessitated, in turn, new quarters for the house of reformation. A building for that purpose was erected at South Boston during the years 1834 to 1837, at a cost of \$50,000.

In the years 1837 to 1839 a hospital for the insane was added to the settlement on the peninsula. The establishment of this institution had been recommended by Mayor Eliot in his inaugural of 1837.¹ The act of April 13, 1836 had required every county to maintain in its house of correction "a suitable and convenient apartment or receptacle for idiots or insane persons."² The Mayor urged the erection of a large, separate building, suitable for many years. Heretofore, Boston had been sending her insane to the state asylum at Worcester. From now on it was able to house not only its own afflicted but also charges from other towns. The cost of this hospital was about \$32,000.

In 1837 and again in 1838 Mayor Eliot recommended an amendment to the charter, transferring the election of the overseers of the poor from the voters to the city council. Each year the council submitted the plan to the voters, only to have it rejected. The opposition of the city council to a board, which had power to spend money, independent of the control of the council, was well grounded. In addition to the right of drawing upon the city treasury, the overseers, as trustees of various charitable funds, estimated in 1838 at over \$100,000,³ enjoyed an independent income. In spending this income they were not obliged to render the slightest account to the city council.

Moreover, the council believed that out-door relief required expert supervision. Alms were distributed in the wards by twelve men, who gave only a very small part of their time. Every winter a swarm of beggars was attracted to the city by the reputation for liberality which the overseers of Boston had acquired throughout the commonwealth. In this branch of expenditure we find the only suggestion of graft before the Civil

¹ *Mayors' Inaugurals*, i, p. 216 (1837).

² *Ibid.*, i, p. 254.

³ *City Documents*, no. 5 (1838), p. 16.

War. Small shopkeepers were said to seek the office in order to sell their goods to the city.¹

Public Grounds. Expenditure for public grounds was of very little importance during this period. In the years 1828 to 1831 parks received but 0.7 per cent of the city's money, a per capita charge of only three cents.

Small as it is, the average expenditure of \$1,869 for the years 1818 to 1821 records a desire for public grounds which goes back to the days of the town. This sentiment explains the charter provision forbidding the city council, which had power to sell all other property, to dispose of Faneuil Hall or the Common without first obtaining the consent of the voters. It also explains the refusal of the citizens to sell for building lots any part of the lowlands at the foot of the Common. These had been purchased from the Ropewalk Proprietors in 1824 at a cost of \$55,000.² This tract of land which extended to tidewater in the Back Bay the citizens resolved to keep open in order that a bountiful supply of fresh air might be let into the city.

Expenditures for public grounds down to 1844 were for the care of the Common, the Mall, and the various burying grounds. In ordinary years the expenditures were only two or three thousand dollars. The abnormal figures for 1836 and 1837 testify to the veneration for the Common which required its enclosure with an iron fence at a cost of \$90,000. Part of this cost was borne by private subscriptions.

Streets. Under this head have been placed, besides the expenditure for the streets themselves, expenditures for kindred objects: sewers, lighting, bridges, ferries, health, and public lands. Though second to schools in importance under the town, this branch of expenditure advanced to first place after 1822. It rose from 19.7 per cent of the total expenditure for the years 1818 to 1821 to 28.5 per cent for the period 1828 to 1831. The movement of such an important branch naturally coincides in the main with the course of the total expenditures of the city. Much street work could be deferred at will. Consequently, in periods of growth, a large part of the increase in the city's expenditures

¹ *Memorial History*, iii, p. 271.

² Quincy, *Municipal History*, pp. 114-116.

can be looked for in this group; in times of retrenchment, expenditure for streets was the first to suffer.

Expenditures for streets quickly responded to city government, rising from \$27,975 in 1820 to \$110,766 in 1825. The very extraordinary figure for 1826 records the completion of the Quincy Market. In the reaction which followed the progressive administration of Josiah Quincy expenditure for streets naturally declined. But with the prosperity of the thirties the figures jumped from \$95,087 in 1831 to \$220,126 in 1832, a rise due largely to activity in street and land improvements.¹ The effect of the panic of 1837 is seen in the fall from \$283,118 in 1836 to \$169,434 in 1838.

Streets Proper. It will be noticed in the table found on page 360 of the appendix that the sum spent for streets proper has been divided into two parts. The first column gives the extraordinary expenditures — the laying out and the widening and extending of streets. The second column contains expenditures which are largely ordinary — the annually recurring cost of paving and repair. Among the tasks bequeathed to the city, was that of adapting crooked and narrow streets to the needs of a growing metropolis. During the last three years of the town little was spent in widening streets. By 1825, however, more was being expended for widening and extending than for paving and repairing.

Power to widen, lay out and discontinue streets was vested by the charter in the board of mayor and aldermen.² The care of the streets, formerly intrusted to surveyors of highways, was transferred to this board by an act obtained in the first year of city government.³ The greater part of the executive work came in time to be done by a committee of the board. In 1827 the office of superintendent of streets was created. A system of surveys was begun in 1825 which made public the exact intention of the city as to future improvements.⁴

¹ See page 360 of the Appendix.

² Ernst, *Constitutional History*, p. 134.

³ *Special Laws*, vi, p. 84 (ch. 107 of 1822).

⁴ Quincy, *Municipal History*, pp. 194-196.

The period of activity in the thirties saw the extension of several important streets, including Broad, Commercial, Prince and Tremont. The continuation of Tremont into the Neck was approved by Mayor Wells as a means of enhancing the value of the city's land holdings in that section.¹ About \$80,000 was spent in the laying out of Blackstone Street, on the site of Mill Creek which formerly divided the old town. The advance in expenditure for paving and repair in 1835 was made necessary, according to Mayor Lyman, by the recent increase in country trade which brought a crowd of "heavily laden waggons upon our pavement." He looked for relief, however, in the rapid increase of railroad facilities.²

Lighting. Expenditures for lighting hold an even course throughout the period. The introduction of city government had very little effect on this branch of expenditure. Fluctuations were principally due to changes in the price of oil which had given trouble to the makers of the town budget.

Toward the end of the first decade of city government the belief that the city was inadequately lighted led to a gradual increase in the number of lamps.³ Apparently, the difficulty was not entirely remedied, for a committee in 1834 complained that the lamps were "very ill distributed" and gave "a feeble light."⁴ On its recommendation the city began in that year to use gas. The sum of \$3,084 appears as the initial expenditure.⁵ In his inaugural of 1835, Mayor Lyman stated that a small saving in money had been effected by the change, and that better light had been secured.⁶ The supplanting of oil by gas was a gradual process. In 1840 the expenditure for gas was a little over one-half that for oil.⁷ The expenditure for lighting rose steadily during the period. In 1820 it was \$6,274; in 1830, \$15,246 and in 1844, \$25,388.

Sewers. Under the town the sewers were constructed and kept in repair by private individuals. Those who entered their

¹ *Mayors' Inaugurals*, i, p. 167 (1833).

² *Ibid.*, p. 190 (1835).

³ *Ibid.*, p. 139 (1830).

⁴ *City Documents*, no. 7 (1834), p. 1.

⁵ *Auditor's Report* (1834), p. 35.

⁶ *Mayors' Inaugurals*, i, p. 201 (1835).

⁷ *Auditor's Report* (1840), p. 33.

drains into the main sewers paid the owners an assessment determined by the selectmen.¹ This system weakened the city's control of its streets, and led to constant disputes between proprietors and those making new entries.² It could not be tolerated by the city. By ordinance of July 7, 1823 the mayor and aldermen were given power to construct all common sewers and to assess those making entries.³

The municipalization of the sewers was regarded as early as 1826 as a great success.⁴ Considerable sums were expended for sewer construction from 1823 to 1828 and still larger amounts from 1832 to 1837. In 1837 greater efficiency was secured by the appointment of a superintendent of sewers. Up to that year the work had been done by the superintendent of streets.⁵ The greatest expenditure for sewers was \$17,050, incurred in 1837; the sum of \$8,774 for 1844 was about the average.

Bridges. Expenditure for bridges was of little importance. Boston had no public bridges before 1828. Those which crossed the surrounding waterways were in the hands of private companies that generally charged toll. The first appropriation for public bridges was made in 1828 for the completion of a bridge to South Boston, which had been partially constructed by proprietors of lands across the channel. The question of building this bridge had been agitated for several years. The city had refused to build the bridge and for a time would not even accept it as a gift.⁶ In 1832 the city unwillingly acquired the Boston South Bridge.⁷ Boston paid \$3,500 for this bridge, and then expended an equal amount in putting it in repair. Beginning in 1836, the item "repair of bridges" appears annually in the auditor's report.

Health. Expenditure for public health was of importance under the town, \$7,500 being spent for this purpose in 1821. City government increased the expenditure for health absolutely,

¹ *General Laws*, i, p. 511 (ch. 47 of 1796).

² *Mayors' Inaugurals*, i, p. 24 (1824).

³ *City Ordinances* (1827), p. 105.

⁴ *Auditor's Report* (1825), p. 18.

⁵ *City Documents*, no. 10 (1837).

⁶ Quincy, *Municipal History*, pp. 246-250.

⁷ *Special Laws*, vii, p. 264 (ch. 136 of 1832).

though not relatively. The figures followed the course of the financial cycles, rising to \$15,468 in 1828 and again to \$35,389 in 1837. This last figure was almost maintained during the succeeding years of retrenchment.

The health department was divided into two branches, external health or the enforcement of quarantine regulations, and internal health or the control of sanitary conditions within the city. The former was very unimportant financially. The little quarantine station in the harbor required an expenditure of only two or three thousand dollars a year. The expenditures of the latter were incurred mainly on account of the removal of house offal and the sweeping of the streets. Under the town the department was in charge of a board of twelve members, one elected from each ward.¹ The charter vested the powers of the old board in the city council,² which, in turn, delegated its control to three health commissioners. Their opposition to certain reforms desired by Mayor Quincy led to their replacement in 1824 by a single commissioner.³

Among the many achievements of Mayor Quincy was that of establishing the present system of street cleaning and of collecting house offal. In the first year of his administration he began a thorough cleaning of the city streets, purchasing horses and wagons for that purpose. Formerly the street dirt had been considered the property of the farmers. This method bore lightly on the city funds but heavily on the general health.⁴ The collection of house offal, formerly made by contractors, was also taken over by the health department.⁵ These reforms undoubtedly contributed to the low death-rate during Mayor Quincy's administration. This was about 20 per 1,000, as against 23 per 1,000 for the preceding ten years.⁶ Further proof of the thoroughness of the cleaning is found in the inaugural of Mayor Otis in 1830. He referred to the sweeping and cleaning of the streets as "practised to a needless and pernicious extreme."

¹ *Special Laws*, ii, p. 308 (June 20, 1799).

² *Ibid.*, v, p. 512.

³ Quincy, *Municipal History*, p. 148.

⁴ *Mayors' Inaugurals*, i, p. 23 (1824).

⁵ Quincy, *Municipal History*, pp. 71-73.

⁶ *Mayors' Inaugurals*, i, p. 87 (1828).

The Mayor agreed, however, to conform to the popular demand that the established degree of cleanliness be maintained.¹

The abnormal expenditure for 1832 records the visit of the Asiatic cholera to Boston. A special appropriation of \$28,604 was made in that year for the erection and maintenance of temporary hospitals.²

Public Lands. One of the city's greatest problems has been to find homes for her citizens. The original uplands of Boston consisted of only seven hundred acres. This area had been doubled under the town through the gradual filling in of the harbor. By 1822 the common lands of the town had been practically reduced to the "Neck," a strip of lowland connecting Boston with Roxbury. Much of this required extensive filling in and grading before it was fit for sale. Although much land was sold during this period, it was put on the market but little improved. Down to 1845 public lands were of greater importance from the point of view of receipts than of expenditures.

Some little expenditure occurred, however, from 1830 to 1838. On the recommendation of Mayor Otis,³ the lands, bordering on the Neck, were surveyed and laid out for sale in accordance with a far-sighted plan.⁴ In 1834 the office of superintendent of public lands was created, and placed under the direction of a joint committee of the city council.⁵ The extraordinary expenditure in 1832 was due to the appropriation of \$49,000 for the purchase of wharves. The average annual expenditure for public lands was only about \$7,000 during the period.

Miscellaneous. The cost of that great improvement, officially known as the Faneuil Hall Extension, but popularly as the Quincy Market, has been placed under the expenditure for streets. The undertaking embraced not only the erection of a new market-house but also the improvement of the market section by the substitution of spacious streets for crooked alleys.

The acceptance of this scheme, involving a gross expenditure of a million dollars, by a people trained in the conservatism of the

¹ *Mayors' Inaugurals*, i, p. 139 (1830).

² *Auditor's Report* (1832), p. 35.

³ *Mayors' Inaugurals*, i, pp. 135, 136 (1830).

⁴ *Ibid.*, p. 156 (1831).

⁵ *City Ordinances* (1834), p. 298.

town meeting was a remarkable tribute to the ability of Mayor Quincy. During the first two years of his administration he worked steadily on the project, getting options from the proprietors of estates and arguing the merits of his plan with both city council and voters. On January 16, 1824 the voters decided in favor of the extension, though the scheme was spoken of by many as the "mammoth project of the Mayor" and as the foundation of a city debt "which neither the present inhabitants of Boston, nor their posterity would be able to pay."¹ In accordance with this mandate, the city council applied to the state for the power of condemning private property. On February 21, 1824 after considerable opposition in the legislature a special law gave Boston the desired authority.²

The council appointed a joint committee, of which the Mayor was chairman, to carry out the scheme. The powers of this committee were large, including the right to spend \$500,000 in the purchase of estates and to borrow money at 5 per cent. In only one case was use made of the extraordinary power conferred by the special act. By September the committee had spent the \$500,000 in purchasing the estates on North Market Street.

A sale of this land, according to a new survey, was arranged for the twenty-ninth of the month. The terms under which the land was offered contemplated the coöperation of the purchasers in the improvement of the market section. Land was to be sold for 10 per cent cash, the residue being secured by mortgage on the estate at $5\frac{1}{2}$ per cent interest. The purchaser was to erect before July first, 1825, brick stores in accordance with specifications fixed by the city.³ The results of the sale were satisfactory; \$303,483 was received, all but \$8,247 being in cash.⁴

The twenty-ninth of December the city council gave the committee authority to expend \$220,000 additional in the purchase of land south of the proposed site of the market. The sum of \$218,347 was, accordingly, expended, including \$105,000 for the purchase of Long Wharf. The sale of lots on South Market

¹ Quincy, *Municipal History*, p. 84.

² *Special Laws*, vi, p. 194 (ch. 148 of 1823).

³ Quincy, *Municipal History*, pp. 124-130.

⁴ *Auditor's Report* (1824), p. 29.

Street took place March 31, 1825, bringing in \$403,853, \$176,982 being in cash.¹ On April 27, 1825 the corner stone of the new market house was laid. On August 26, 1826 the house was opened, and the use of Faneuil Hall as a market discontinued.²

In November, the committee through Mayor Quincy made its final report. The total amount of money expended amounted to \$1,141,272, only \$166,935 of this sum being spent for the market-house itself. From its land sales the committee had obtained \$532,797 in cash, leaving a debt of \$608,475 for which city stock had been issued. As an offset to this debt, the committee was able to turn over to the city good interest-bearing notes amounting to \$219,709 and unsold land worth \$200,000.

The remaining \$200,000 can be looked upon as the price paid for a market-house worth from three to four hundred thousand dollars and for the acquisition of six broad market streets with good brick buildings.³ The possession of an adequate market section was an important factor in the growth of Boston as a distributing center for the food products of New England. The credit of carrying out so very successfully this early municipal venture belongs to Josiah Quincy who brought to his public work greater zeal than most men display in private matters.

Schools. From the establishment of the first school in 1635 to the present day, appropriations for education have always been looked upon by the citizens of Boston as the best possible use of the public money. The decline of school expenditure from 26 per cent of the total expenditures, the last years of the town, to 19.2 per cent in the period 1828 to 1831 is due to the fact that the need for schools was already well supplied.

The present system goes back to 1789 when a Latin School, preparatory for college, and six grammar schools were established. At the same time the power of appointing masters, fixing salaries and determining the general expenditures of the department was transferred from the board of selectmen to a committee, consisting of the selectmen and twelve other persons, who were elected in town meeting. In 1818 instruction to children of four

¹ See note 4, p. 31.

² Quincy, *Municipal History*, p. 136.

³ *Ibid.*, pp. 201-204.

to seven, formerly given in the home or in the "dame school," was made a public charge. The care of these primary schools was given to a committee appointed by the school committee.¹ In 1820 the English Classical School, providing a higher education for boys who expected to enter business, was started. Consequently, the city found the school system in need of no radical changes.²

The act of establishment changed the organization of the school committee. The mayor and aldermen were to take the place of the selectmen, and the rest of the committee, instead of being elected by the voters at large, were to be chosen one from each ward.³ Chapter 128 of 1835, adopted by the voters in the same year, again altered the composition of the committee. It was to consist of the mayor, the president of the common council and two citizens from each ward, making twenty-six in all instead of twenty-one.⁴

It will be seen from the table found on page 364 of the appendix that the great rise in school expenditure the first few years of city government was due, partly to an increase in the payment for instruction, but still more to greater activity in the erection of school buildings. Expenditure for new buildings may be looked upon as abnormal down to 1844.

In 1825, \$935 was spent in establishing a "High School for Females."⁵ Here it was intended to give the girls instruction similar to that offered the boys. Within two years the innovation fell before the attacks of its opponents who asserted that it existed chiefly for the benefit of a few from the well-to-do classes. Even Mayor Quincy was very strong against the school, believing that it would be a much sounder policy to spend the money in raising the standard of the common schools.⁶

After the first four years of city government the annual expenditure of the department dropped to about \$50,000. Here it remained until the need of new schoolhouses and of a larger teaching force carried it from \$55,276 in 1831 to \$156,821 in 1838. In

¹ Ernst, *Constitutional History*, pp. 82-85.

² Quincy, *Municipal History*, pp. 20-22. ³ *Special Laws*, v, p. 513.

⁴ Ernst, *Constitutional History*, p. 113.

⁵ *Auditor's Report* (1825), p. 26.

⁶ Quincy, *Municipal History*, p. 271.

1834 Boston began to build houses for her primary schools. Gradually the city was able to transfer these schools from inadequate, rented rooms to its own well-equipped buildings. The rapid increase in population called for larger school accommodations. From 12,401 in 1841 the number of pupils rose to 21,951 in 1851.¹ In 1843, in answer to complaints of the crowded condition of the schools, the city spent \$81,477 for new buildings, a large sum for a time of retrenchment.² The period closed with a great increase in expenditures for schools. In the years 1840 to 1843 this branch claimed 26 per cent of the city's expenditures.

The growth of expenditure for salaries during this period was remarkably even. The compensation of teachers in the primary schools rose from \$8,500 in 1822 to \$14,933 in 1830, \$31,388 in 1840 and \$40,197 in 1844. The salaries of teachers in other schools remained at about \$35,000 down to 1832 when a steady growth began; in 1840 they were \$70,483 and in 1844, \$89,005. Individual salaries were not raised to any extent. Salaries in the primary schools, the only branch of the department in which women were employed, did not exceed \$250. This sum included remuneration for the rent and care of the schoolroom.³

County of Suffolk. At the time of the incorporation Boston assumed all the charges of the County of Suffolk.⁴ Chapter 109 of the acts of 1821 abolished the court of sessions. Its administrative functions were divided between the board of mayor and aldermen and the officers of the various courts. The town of Chelsea was to enjoy county privileges as formerly, but was to be relieved of paying any part of the county expenditures.⁵ In 1831 Chelsea relinquished in favor of Boston her claim to county property.⁶ This relation between the city and her ward was to continue until 1851, unless Chelsea should apply in the meantime to be set off in another county and from 1851 on until change should be made by the legislature.

This change was on the whole a gain for Boston. The city obtained greater control over the affairs of a county, the limits of

¹ *City Documents*, no. 2 (1853), p. 142.

² *Ibid.*, no. 15 (1843).

³ *Auditor's Report* (1836), p. 27; *ibid.* (1845), p. 47.

⁴ Sprague, *City Government*, pp. 29, 31.

⁵ *Special Laws*, v, p. 500 (ch. 109 of 1821). ⁶ *Ibid.*, vii, p. 146 (ch. 65 of 1831).

which practically coincided with those of Boston. Complete control of county expenditure was prevented by the transfer to the various court officers of the privilege of contracting the greater part of the ordinary expenditure of the county, such as payments for court proceedings and the maintenance of prisoners. Bills arising in this manner were to come before a board of accounts, composed of the judge of probate, the justices of the police court and the judge of the municipal court.¹ This lack of control over a large part of county expenditure was a cause of constant regret to the city.

The figures given in the table on page 353 of the appendix represent simply the ordinary expenditures of the County of Suffolk.² County expenditure, which made up no small part of the city payments, moved gradually upward. It even advanced in times of depression. County expenditure advanced from about \$26,000 in the years 1818 to 1821 to \$32,000 for the years 1828 to 1831. In the latter period it constituted as much as eleven per cent of the total expenditure of Boston. In the period 1840 to 1843 county expenditures averaged \$48,773 or about eight per cent of the city's expenditure.

County expenditures are divided into two groups.³ The first contains those payments made on requisition of the mayor, the second, those made on demand of the county board of accounts. The greater part of the ordinary county expenditure lay beyond the control of the city council. "Mayor's drafts" made up but one-sixth of the total county expenditure. The second branch of expenditure has been divided into two parts. The more important division includes the sums paid to jurors, witnesses and constables. All other payments allowed by the board of accounts have been placed in the second part, the charge for maintenance of prisoners being the chief item.

¹ *Special Laws*, v, p. 503 (ch. 109 of 1821).

² Up to 1825 the county appropriation included extraordinary items. For the sake of consistency, I have placed these under the expenditure for general government. My figures of total expenditure from 1834 to 1841 exceed the amounts given in the auditor's reports as chargeable to the County of Suffolk. I have added to the latter figures certain ordinary expenditures given by themselves during this period, but really incurred for county purposes.

³ See Appendix, p. 353.

RECEIPTS

We now come to the story of the way in which Boston raised money to meet her growing expenditures. In studying the different branches of her receipts, a scheme of classification has been employed, which allows an analysis in considerable detail.

Taxes. First in importance come taxes. These consisted of the general property tax and the poll tax. Under the city, receipts from taxation declined somewhat in relative importance. For the period 1818 to 1820, 83 per cent of the receipts were obtained by taxation; in 1828 to 1831, only 64 per cent. This fall was due to the creation of new sources of receipts, particularly the health department and the County of Suffolk, and to the increase in the importance of several of the old branches, such as interest and sales of property. The percentage rose to 77 in the years 1840 to 1843.

The growth of the sum raised by taxation, unlike the movement of expenditures, was steady. It maintained its upward course even in periods of reaction, for the reason that retrenchment in expenditure was generally accompanied by payments toward the principal of the city debt.

The decade of the twenties saw the smallest percentage of increase. The rise from \$159,649¹ in 1819 to \$247,061 in 1829 meant an advance of only 55 per cent, whereas expenditure more than doubled in this period. The city government was becoming acquainted with the convenience of the loan, and gladly kept down the tax rate. In his inaugural of 1826 Mayor Quincy referred with pride to the growth of assessable property which had permitted the maintenance of a low tax rate.² From 1814 to 1821 the rate averaged \$4.07 on a thousand; during the first eight years of city government, it was only \$3.67. The city was slow to recognize the necessity of a higher rate.³

¹ Figures for tax receipts given in this section include returns from poll taxes as well as from property.

² *Mayors' Inaugurals*, i, p. 51 (1826).

³ Prior to 1842 assessments were made upon 50 per cent of the true value of the property, since then at 100 per cent. In this book the rates and assessments before 1842 have been reduced to the 100 per cent basis. The law permitted assessment

After 1830, however, there was a steady rise both in the amount raised by taxation and in the tax rate. From \$247,061 in 1829 the receipts from this source advanced to \$511,888 in 1839, an increase of 107 per cent. The tax rate had meanwhile risen from \$3.95 to \$5.65, in response to the growth of expenditure in the latter thirties. At this level it was kept and even slightly increased by Mayors Chapman and Brimmer, who, despite the call for lower taxes, insisted upon the reduction of the city debt. In the twenties the amount of assessable property advanced 56 per cent; in the thirties it rose 49 per cent.

In 1820 the tax levy of \$155,909 meant a per capita burden of about \$3.60; the \$253,106 raised in 1830 advanced it to only \$4.10. In 1840 the receipts from taxation were \$537,648 and the per capita figure, \$5.75; in 1844, a tax of \$722,038 increased the amount for every inhabitant to \$6.50. The burden was still light, however. The amount of assessable property per capita increased slightly, from about \$930 in 1820 to \$1,070 in 1844.

A comparison of the rates of growth of real and personal property in the assessment list reveals the decreasing importance of the latter.¹ In 1794, personal property constituted 57 per cent of the valuation; by 1824 it had fallen to 45 per cent and by 1834 to 42 per cent. The tendency of personal property to escape taxation under the general property tax is, of course, the explanation.

The proportion of taxes uncollected at the end of each year showed a tendency to increase during this period. From 1818 to 1824 all but about 6 per cent were collected each year, a condition which called forth the commendation of Mayor Quincy in his inaugural of 1826.² By 1840, however, the ratio had risen to 8 per cent.

On the other hand, the percentage of abatement was much higher under the town than under the city. For the years 1818 to 1821 4 per cent of the taxes assessed were abated;³ the average for 1823 and 1824 was only 1.3 per cent. In the period 1840 to 1852 abatements constituted 1.6 per cent. The town assessors at a reduced value, provided the records showed both the real value and the assessed value.

¹ *City Documents*, no. 2 (1853), p. 139. ² *Mayors' Inaugurals*, i, p. 51 (1826).

³ *Auditor's Report* (1822), p. 7.

had abated in gross at the end of each year a list of taxes which the treasurer deemed uncollectable. The assessors under the city were much more strict.¹

The method of assessment employed in Boston during the period was essentially the same as that in use at the present day. Under the town twenty-four persons were elected annually by the voters, two from each ward, to act as assessors. These, in turn, appointed three principal assessors to hold office for the ensuing year.² This method of selection continued until the incorporation of the city, when the power of electing these officers was transferred to the city council. It became the practice to choose the three principal assessors from the citizens at large and the twenty-four assistants from the residents of the different wards.

The task of assessing real estate to any amount, and personal property up to \$5,000 in value, was entrusted to sub-committees, composed of a principal assessor and the two ward assistants.³ In 1843, the sum of \$73,000,000, out of a total of \$110,000,000, was assessed in this manner.⁴ All personal estates of \$5,000 or over were left to the board as a whole to "doom."

Complaints both as to inequality in assessment and as to the injustice of the system as a whole were frequent. A joint committee of 1842 admitted that the custom of giving representation to the wards led to great inequality, even in the valuation of real estate.⁵ It recommended the appointment of commissioners every five or ten years to value all the real estate in the city, leaving to the permanent assessors simply the task of correction, when improvements were made. This proposal was not favored by the city council. In his inaugural of 1844, the mayor spoke of the assistant assessors as being really ward officers, who were chiefly interested in keeping down the valuations of their own sections. He also referred to the fact, that the principal assessors had, in practice, been reduced to the position of clerks to the board, being compelled to assent to the decision of the majority.

¹ *Auditor's Report* (1822), p. 7.

² *Special Laws*, iii, p. 6 (June 18, 1802).

³ *Auditor's Report* (1856), pp. 239-241.

⁴ *City Documents*, no. 5 (1844), p. 5.

⁵ *Ibid.*, no. 9 (1842).

To check the abuses, he advocated electing the assistants from the citizens at large and giving them merely advisory powers.¹

The chief and most frequent complaint was directed, then as now, against the method of assessing personal property. Taxpayers were allowed to present statements of their personal property. In case they neglected to do so, they were arbitrarily doomed by the board. No abatement was allowed in the courts in case the person aggrieved had failed to return the statement. During the early years of the city the assessors seldom abated any tax above \$16, unless the conditions of the statute had been fulfilled. In 1827, only twenty-six statements, representing but \$403,000 in property, were turned in. Mayor Quincy considered the method of assessing personal property a menace to the prosperity of Boston. He believed that an accurate exhibit of personalty was ruinous to a business man, besides being in many cases entirely impracticable. Correspondence with the mayors of New York, Baltimore and Philadelphia disclosed the fact that no statement of personal property was required in those cities before assessment. The mayor referred to the removal of great capitalists to other cities because of this arbitrary law, as common knowledge.² Such evils led the committee of finance in 1839 to recommend placing the whole burden of taxation on real estate.³

This very strict policy with regard to abatement was apparently modified after the first decade of city government. The assessors, down to 1844, gave a very lenient construction to the statute, allowing a hearing to all aggrieved persons. In one year, sixteen out of the thirty-one meetings were devoted to the consideration of petitions for abatement. In 1844, however, the assessors returned to the old practice of hearing no petitions except in case statements had originally been given. This change brought forth a storm of protests from the taxpayers.⁴

Poll taxes were assessed at the beginning of this period upon every male inhabitant between the ages of sixteen and seventy years. In 1843 chapter 87 raised the minimum age to twenty

¹ *Mayors' Inaugurals*, i, pp. 301, 302 (1844).

² *Ibid.*, i, p. 84 (1828); Quincy, *Municipal History*, pp. 231-234.

³ *City Documents*, no. 12 (1839).

⁴ *Ibid.*, no. 9 (1848), p. 5.

and chapter 145 of the next year abolished the maximum of seventy.

In colonial days receipts from the poll tax had been important. The low per capita burden of taxation and the greater equality of wealth made the poll tax practicable. But with the growth of fortunes after the Revolution it was natural that taxes should be levied more upon property and less upon polls.

The rate of the poll tax was limited by the state legislature in the following manner. From early times the government of Massachusetts had been in the habit of apportioning a sum among the various towns to be raised by a levy on polls and property.¹ The practice arose, in determining what each town should pay in every thousand pounds, of counting the polls at a certain figure. In 1782 each poll was rated at one penny in a tax of £1,000 which meant that about one-third of the state tax must be raised from polls. In 1792 the rating was reduced to one-half penny, polls making up about two-ninths of the apportionment.² By 1813 the legislature had reduced the rating to one mill or practically one-sixth of the levy.³ This meant a poll tax for state purposes of twenty-seven cents. From 1813 to 1822 it stood at fourteen cents.⁴

In the various tax acts which fixed the apportionment of the state tax it was provided that "in the assessment of all county, town, parish, or society taxes, the assessors — shall assess the polls therein in the same proportion as they may be assessed to pay a state tax."⁵ The tax act for 1814 provided that the total assessment for state, county and local purposes should not thereafter fall more than one-sixth on polls.⁶

In 1821 Boston levied a poll tax of \$1.60 for all purposes, \$0.14 of this being the state poll tax for that year.⁷ This tax levied on approximately eight thousand polls would have amounted to

¹ Bullock, *Finances of Massachusetts*, pp. 1, 2.

² *Ibid.*, pp. 12, 13.

³ *Ibid.*, p. 30.

⁴ *Report of Commissioners on Taxation and Exemption* (1875), p. 17.

⁵ *Ibid.*, p. 17.

⁶ Bullock, *Finances of Massachusetts*, p. 32.

⁷ *Boston Tax Lists* (1821).

\$12,800 or about one-twelfth of the total assessment. This was therefore but one-half of what the law permitted.

The possibility of a very heavy poll tax, in spite of the limitation to one-sixth of all assessments, led to a very wise provision in chapter 143 of 1828 which regulated many matters of assessment by perpetual act. This required the assessment of one-sixth of all taxes upon polls, provided that the total assessment for city, town and county purposes, highway taxes excepted, should not exceed \$1.50. Without this limitation it would have been possible for Boston to have levied in 1844 a poll tax of over \$5. In 1844 Boston levied a poll tax of \$1.50; this meant that only $4\frac{1}{2}$ per cent of the total assessment fell on polls.¹

A state tax was levied in only eight years during the period. From 1826 to 1860 Massachusetts was attempting to secure her receipts from other sources. Frequent deficits, however, finally forced the state to go back to the annual apportionment of the tax among the towns and cities.² In 1821 the share of Boston was raised from 13.7 per cent, the quota since 1811, to 33.1 per cent, a figure which it held with scarcely any change throughout the period.³ This remarkable increase was due to the recent separation of Maine and to the rapid growth of wealth in Boston.

In this period the state tax when levied was placed without exception at \$75,000, the city's share being about \$25,000. From 1822 to 1825 the quota of Boston made up 15 per cent of the city's tax receipts, accounting for fifty-five cents out of an average rate of \$3.90. In 1830 the city turned over 10 per cent of the amount raised by taxation to the state which represented about forty cents of the tax rate for that year. By 1844, the \$25,000 quota had become unimportant, demanding only 3 per cent of the city's receipts from taxation.

Rents. The receipts derived from the rent of city property were of considerable importance during the greater part of the period. From 1818 to 1820, 9 per cent of the total receipts were

¹ *Auditor's Report* (1845), p. 14.

² Bullock, *Finances of Massachusetts*, ch. IV.

³ Felt, *Statistics of Taxation in Massachusetts*, p. 543; *Massachusetts Resolves*, 1821, ch. 61.

obtained from this source; in the period 1828 to 1831, just after the completion of the new market, the same percentage prevailed. In 1840 to 1843 rents contributed 6 per cent of the total. The growth of this branch of receipts was on the whole gradual, the exceptional rise from \$15,714 in 1822 to \$34,636 in 1829 being due to the market extension. In 1839, \$48,825 was received from rents; and in 1844, \$54,954.

The completion of the new market-house in 1826 raised the receipts from rents from \$18,714 in 1825 to \$27,992 in 1826, and \$35,739 in 1827. The old market under Faneuil Hall was cut up into store rooms which in 1828 brought in \$4,000 in rents. The old State House contributed about \$3,500 annually during these years. After the building was made over into a city hall in 1830, it brought in still more from the rent of the lower floors. It will be noticed in the table given on page 372 of the appendix that after 1833 the receipts from the market, which had up to that time constituted the greater part of the total amount received from rents, declined in relative importance. The acquisition of other rentable property now began to increase the rents of the city.

In 1834 the new city wharf, which had been built on the flats to the east of Faneuil Hall, was leased to proprietors for \$10,000 a year until 1852.¹ In that year the wharf with the stores erected upon it by the lessees was to revert to the city. When the lease finally expired the city council concluded to sell the property rather than to repair the stores. It was accordingly sold at auction to Josiah Quincy, Sr., for \$411,000. An order of the council devoted the proceeds to the payment of the city debt.²

Interest. Interest receipts fluctuated considerably. Bonds and notes, cash on deposit in the banks and deferred taxes were the chief sources. Though interest made up but one per cent of the total receipts during the last years of the town, it grew to four per cent in the period 1828 to 1831. This increase was due to large land sales and payment for these purchases in interest-bearing bonds and notes. The course, which the amount of

¹ *Auditor's Report* (1841), p. 71.

² *City Documents*, no. 65 (1852); *ibid.*, no. 44, p. 5.

bonds and notes held from year to year, is reflected in the rise and fall of the receipts from interest. The correspondence is not exact, however, because of the contribution of other factors, such as deposits in banks, interest on deferred taxes and rents and, in the years 1834 and 1836, the addition of premiums on loans.

In the period 1840 to 1843 interest made up only one per cent of the total receipts. At this time the decline in land sales reduced the supply of interest-bearing notes. But after 1843 the amount of bonds and notes rose very rapidly from \$69,000 in that year to \$455,000 in 1846. Interest, consequently, rose from \$8,598 in the former year to \$35,853 in the latter.

Licenses. Under the town the various licenses contributed less than 0.1 per cent of the total receipts. After 1822 the license system was extended, but it was employed more for purposes of regulation than for revenue. For the years 1828 to 1831 fees from licenses averaged \$2,319 or 0.6 per cent of the annual receipts of the city. In the period 1840 to 1843 licenses gave only an annual average of \$1,604 or 0.2 per cent.

Very few of these taxes were kept in force long. The licenses of innholders, granted by the board of mayor and aldermen,¹ were the most productive. Receipts from innholders' licenses varied considerably in accordance with the policy of successive boards; toward the last of the forties no liquor licenses were granted at all.² Another productive license was that upon theatrical shows and other exhibitions. The auditor's report for 1823 gives the following entry: "Edward Everett, Lectures on Antiquities, and exhibition of Pictures connected therewith, \$15.00."³ Among other licenses enforced at different times during this period were those for cows and dogs,⁴ chimney sweepers⁵ and keepers of junk shops and second-hand stores.⁶

Special Assessments. The auditor's report shows no trace of any receipts from special assessments during the last years of the selectmen, although the statutes gave the town power to assess the cost of sidewalks upon abutters, whenever a street was paved.⁷

¹ *Special Laws*, v, p. 510.

⁴ *Ibid.* (1825), p. 32.

² *Mayors' Inaugurals*, i, p. 373 (1849).

⁵ *City Ordinance*, December 28, 1835.

³ *Auditor's Report* (1822), p. 17.

⁶ *City Documents*, no. 16 (1839).

⁷ *Special Laws*, ii, p. 338 (June 22, 1799).

A system of private assessment was employed, however, in determining the amount due proprietors of common sewers because of entries.¹ Such charges were determined by the selectmen, who divided the cost in proportion to the benefits. When the sewer system was municipalized in 1823 the city retained this special assessment.² Sewer assessments constituted the sole receipts from special assessments during this period.

The determination and collection of sewer assessments was made the work of the auditor. This slow and exacting task, combined with the ordinary duties of the auditor, account for the very small amount collected in some years.³ From 1830 to 1833 hardly any money came in, but in 1834 extra assistance enabled the auditor to collect \$11,918. In 1836 he placed but \$71 to the credit of special assessments. As a result of this slowness in collection, a committee was appointed in 1837 to consider the subject.

The report of the committee made clear the need of a special officer for the assessment work. From 1823 to 1836, although the city had expended \$121,109 on its sewers, but \$26,431 had been collected from individuals. To provide against further loss, the committee recommended the appointment of a superintendent of sewers, who was to have charge of both construction and assessment. An ordinance of the same year embodied this excellent suggestion. The task of collecting the assessments was given to the city treasurer.⁴ The increase in collections was immediate.

In the years 1828 to 1831 the receipts from special assessments averaged only \$879 or 0.2 per cent of the city's total receipts. By the period 1840 to 1843 they had risen to \$2,560 or 0.3 per cent.

In 1841 an act was passed, requiring the payment of three-fourths of the cost by the abutter.⁵ Down to 1840 the assessment had been proportionate to the value of the abutter's lands and buildings. In that year a decision of the supreme court declared the practice unreasonable and void in law, requiring apportionment in the future according to the value of the land alone.⁶

¹ *General Act*, February 20, 1797.

² *City Ordinance*, July 7, 1823.

³ *Mayors' Inaugurals*, i, p. 161 (1831).

⁴ *City Documents*, no. 10 (1837).

⁵ *Ibid.*, no. 34 (1893), p. 119.

⁶ *Ibid.*, no. 15 (1840).

Health. Receipts from the health department, which amounted to very little under the town, contributed as much as two per cent of the total receipts of the city in the period 1828 to 1831. At that time the receipts of the department averaged \$7,274, or one-half of the expenditure for health.

In 1824 Mayor Quincy added to the quarantine and burial fees receipts from the sale of street dirt. In 1828 the city found a market for its house offal. It was sold under contract, bringing in on the average from three to four thousand dollars a year.

Institutions. From a contribution of four per cent of the total receipts in the periods 1818 to 1820 and 1828 to 1831 the receipts from the institutions rose to five per cent in the years 1840 to 1843. The receipts were derived from payments made by the state and towns for the support of their poor and also from the labor of the inmates.

The wise policy of occupying in useful labor all those able to work was adopted at the outset by the city government. The receipts obtained from the sale of their products were considerable, although before 1841 the amount was not turned over to the city treasurer and so does not appear in the auditor's account. Of the \$25,000 received from the proceeds of labor in 1841, \$19,000 was contributed by the house of correction, and \$6,000 by the house of industry and reformation.

The almshouse had long sheltered not only the poor of Boston but also part of the paupers of the commonwealth and of other towns. The state had no poor-houses down to 1854, and so was obliged to board out her paupers. Of the total amount paid by the state for their maintenance, Boston received from one-quarter to one-half. In the years 1840 to 1843, the city was paying almost one-half of the expenditure for institutions out of the receipts from the various establishments.

School Fund. In accordance with the law of March 31, 1834 (chapter 169), which created the Massachusetts School Fund, Boston received a small sum annually for the support of the common schools. The school fund was to be constituted from the \$281,000 received from the federal government in 1831 in payment of the state's war claim, from money in the treasury on

January 1, 1835 derived from the sale of lands in Maine and from one-half the proceeds of future sales of Maine lands.¹ Down to 1854 the entire income from this fund was apportioned among the towns on the basis of the school census. The town was required to raise a certain amount for the education of each child.²

In 1840 the principal of the fund amounted to \$437,000,³ yielding an income of \$22,000.⁴ The receipts of the city from this source paid a very small part of her school expenditures. The amount received averaged \$2,682 in the years 1840 to 1843, equivalent to only 0.3 per cent of her total receipts.

Sales of Property. The sale of public property brought in large, though very variable, receipts throughout the period, consisting in the main of the proceeds of land sales. The money credited each year to sales of property included not only the cash sales of that year but also the payments made upon bonds and notes. Just what part of these payments is due to sales of land and what part to sales of other property can not be determined. From 1837 to 1859 we are able, however, to construct a table, giving the number of feet of land sold each year and the amount received each year whether in cash or in bonds and notes.⁵ This shows the fluctuating character of the receipts from land sales.

In the years 1818 to 1820 sales of property brought in about \$4,000 annually, or two per cent of the entire receipts of the town. The gradual alienation of the common lands left Boston in 1822 with only the low-lying Neck lands and some scattered holdings. In the first year of the city \$13,438 was obtained by the sale of one of these bits of territory, the "Mill Pond Lands," in the North End. This was sold to a corporation for development.⁶ Thereafter practically all the receipts were from the sale of lands on the Neck, the value of which was responding to the demand of a growing population. The city council saw in this territory a resource against the new public debt and pursued the policy of

¹ Bullock, *Finances of Massachusetts*, p. 37.

² *Acts*, 1841, ch. 17.

³ Bullock, *Finances of Massachusetts*, p. 37.

⁴ Massachusetts, *Auditor's Report* (1850), p. 39.

⁵ See Appendix, p. 380.

⁶ *Auditor's Report* (1822), p. 16.

selling it only at very good prices.¹ In November, 1825, a sale of eleven lots brought in \$18,447, at prices varying from thirty-one to forty-three cents per square foot.² The good market for land at this time made possible the derivation of large sums from this source. In the period 1828 to 1831 the receipts from sales of public property averaged \$42,063 annually or ten per cent of the total receipts of the city.³

The management of the public lands was improved by the ordinance of April 10, 1834. This provided for a superintendent of public lands, to be elected annually by concurrent vote of the city council. He was to have charge of the laying out and sale of the city property, subject to the direction of a joint committee of the council. This committee consisting of two members from the board of aldermen and three from the common council, was to determine the general conditions of sale, such as the fixing of minimum prices for the land.

The receipts from sales of property declined after 1835, falling as low as \$12,000 in 1842. In 1840 only 2,430 feet of land were sold, bringing in but \$841.50. In the years 1840 to 1843, the first three of which fell within the period of depression, sales of property contributed but four per cent to the total receipts of the city. The quickness with which prosperity returned after stagnation is shown by the rise in the proceeds of land sales from \$6,605 in 1842 to \$93,876 in 1843 and \$128,124 in 1844. For the entire period 1822 to 1844, the sales of property amounted to \$830,000, an average of almost \$40,000 a year.

Alien Passenger Tax. By chapter 150 of 1830 the selectmen in towns and the mayor and aldermen in cities were given power to require a three-year bond from the transportation company that the immigrant should not become a public charge. In lieu of a bond, the city might demand a payment of \$5.00. In 1831 the first record of such receipts appears in the auditor's report. The sum of \$15 was collected in that year;³ in 1834 the collections from this "head tax" amounted to \$330.⁴ The increase in immigration after this time led to further legislation in 1837; by

¹ *Auditor's Report* (1823), p. 5.

² *Ibid.* (1825), p. 18.

³ *Ibid.* (1831), p. 15.

⁴ *Ibid.* (1834), p. 22.

chapter 238 a bond for ten years was required in the case of all likely to become incompetent and a payment of \$2 in the case of all others. Under authority of this law the city appointed a superintendent of alien passengers.¹ In his first year he turned into the city treasury \$4,237.²

An act of 1840 compelled the towns and cities to pay into the state treasury the surplus remaining after making payments for the maintenance of alien paupers.³ The law was not followed to the letter. The city was required to pay over its entire receipts, a certain amount being returned for the support of state paupers. This was insufficient, however, to indemnify the city for the great expenditures required during the Irish influx. The receipts from the "head tax" averaged \$3,438 for the period 1840 to 1843 or 0.4 per cent of the total receipts of the city.

County of Suffolk. When the city assumed the expenditures of the County of Suffolk in 1822, it also obtained the county receipts. These consisted of payments by the commonwealth for the cost of criminal prosecutions, the receipts from fines, fees and costs, and certain small returns, such as license fees and the rent of the county property.⁴ In the years 1828 to 1831 the county contributed about \$22,000 a year, as much as six per cent of the total receipts of the city. The amount received varied but little during the first decade of city government. After 1832 we find, however, very great fluctuations, due in large measure to irregularity in the repayment of costs by the state.

Down to 1841 the commonwealth assumed the whole cost of criminal prosecutions, fines and penalties arising in this connection being paid into the state treasury.⁵ In that year, however, an act imposed one-third of this burden upon the county.⁶ Consequently, in the years 1840 to 1843 the average annual receipts of the county were only \$20,000, but three per cent of the total receipts of the city. Forty-two per cent of the county expenditures were paid at this time out of county receipts.

¹ *Mayors' Inaugurals*, i, p. 227 (1838).

² *Auditor's Report* (1837), p. 21.

³ *Acts*, 1840, ch. 96.

⁴ For table giving details, see Appendix, p. 374.

⁵ *City Documents*, no. 98 (1860), p. 9.

⁶ *Acts*, 1841, ch. 74.

Miscellaneous. In 1837 Boston received \$140,599 as her share of the surplus revenue distributed among the states by the federal government. Massachusetts chose to distribute her part among the towns and cities, assigning it on the basis of population. This money was not devoted by Boston to any special object, although a committee of the city council favored using it to build a new city hall. It went into the general balance, enabling the city, according to the auditor, to avoid contracting contemplated loans.¹

DEBT

The city form of government resulted in the accumulation of a permanent debt. Although the town bequeathed no debt to the city, the sum of \$71,185 had just been borrowed by the county treasurer toward the cost of the court house and jail. The assumption of this county loan gave Boston her start on a public debt. In the first year of the city this loan was increased to \$100,000 for the purpose of completing the county buildings. The old time zeal for speedy redemption is shown by the demand of the committee of finance that the loan be repaid out of taxes, in instalments of at least \$10,000 a year. This recommendation was adopted by the city council.²

That the council did not at this time contemplate the creation of a permanent debt is evident from the following incident. In November, 1823, Mayor Quincy addressed the council on the expediency of inaugurating a general system of loans, "payable by instalments, incurred for objects of permanent improvements, in which posterity were generally and chiefly interested."³ The Mayor pointed out the great economy of widening the streets before an increase in population should render the task too expensive. But the committee to whom the message was referred looked with too great apprehension on a city debt, believing that the chance for abuse in such a system more than offset its advantages.

By 1825, despite the reluctance of the city council to borrow, the issue of loans to purchase the Ropewalk Lands, to construct

¹ *Auditor's Report* (1837), p. 7.

³ Quincy, *Municipal History*, p. 111.

² *Ibid.* (1822), p. 35.

the house of correction and for other purposes had brought the debt to \$305,000.¹ This sum meant a per capita figure of only \$5.25. By 1830, however, the debt had increased to \$663,000, a burden of \$10.90 on each inhabitant. In 1840 it was \$1,526,000 or \$16.40 per capita.

That Mayor Quincy succeeded in overcoming to a certain degree the popular aversion to debt is evident by the rise to \$712,000 in 1827. This great advance was largely due to the extension of Faneuil Hall Market. The justification of the debt of 1827 is found in the permanence and profitableness of the objects for which the greater part of it was spent. Although Mayor Quincy did not fear the legitimate employment of the city's credit, he did see clearly the danger of its abuse. To provide for the repayment of the Faneuil Hall extension loan, he recommended to the council that the entire income of the property acquired in connection with that improvement be specifically appropriated to the reduction of the loan.² Though the council did not adopt this identical suggestion, it did pass an order in 1827 providing for the annual assignment of certain funds toward the extinction of the debt.³

The order of 1827 was the outcome of a conviction that a debt of such magnitude required the adoption of a definite and comprehensive system of reduction. In the first two loans made by the city, provision had been made for the repayment by instalments, the intention being to meet these charges from taxes. In his report for 1824, page 23, the auditor states that the city council held the intention of devoting "to the liquidation of the public debt" the annual payments on a note for \$100,000 received from the sale of the old "Alms-house Estate, in Leverett Street." The "sinking fund" order of 1827, which framed a definite policy out of these earlier attempts, provided that after the commencement of each financial year there should be set aside for the reduction of the debt the balance in the treasury, and "all proceeds from sales

¹ The figures given throughout this book are for the net debt. These figures, taken from the *Auditor's Report*, 1908, p. 212, are obtained by subtracting from the gross funded debt the "quick assets" of the city — cash in the treasury and bonds and notes. See Appendix, p. 378.

² *Mayors' Inaugurals*, i, p. 66 (1827).

³ *Auditor's Report* (1826), p. 42.

of Real Estate, or Bonds and Notes, belonging to the City.”¹ These specific assignments were in addition to the \$15,000 appropriated annually for the payment of instalments on the first two loans. The management of this fund was intrusted, by an order of April 23, 1827, to a committee composed of the mayor, the president of the common council and the chairman of the committee of finance.² The sums appropriated for the reduction of the debt were credited annually to the account of the committee. All debt falling due within the year was likewise charged against their funds.

This system seldom allowed the carrying over of a large balance to the committee's credit. In some years the committee was obliged to supplement its resources by making a “Redemption loan.” The plan did not contemplate the adoption of a pure sinking fund which should be allowed to accumulate from investment. The committee very early adopted the policy of fixing the maturity of its loans in such years as would allow gradual repayment. Had the debt not come due faster than the committee could take care of it, the problem of surplus funds might have arisen.

The “sinking fund” went into operation after the period of rising expenditures. In the subsequent period of rest, which continued until 1833, it was to be expected that, with constant expenditures the new policy would make some impression on the debt. In the first year of the committee's activity, 1827, the debt was reduced by only \$42,000. And yet in that same year about \$45,000 was obtained from sales of property. At this time we find very favorable opinions of the efficacy of the new device. The committee on reduction in its first annual report approved of the system on the ground that, although it created no new funds, yet the plan made sure that the “funds, which, from their very nature, belong to the liquidation of the Public Debt,” should be appropriated to that object.³

In 1830, when the old State House was made over for use as a city hall, the city council ordered that all income derived from the

¹ *Auditor's Report* (1826), p. 42.

³ *Ibid.* (1827), p. 45.

² *Ibid.* (1827), p. 41.

rent of its stores above \$3,500, the amount received under the old rent schedule, should be appropriated to the reduction of the city debt.¹ By virtue of this order a trifling sum, less than \$1,000, was annually turned over to the committee.

The expectations of the committee of 1827 were not fully realized. During the years 1827 to 1831 a reduction of only \$71,000 was made, the debt falling from \$712,000 in 1827 to \$641,000 in 1832. In this same period the city received \$211,000 from the sale of its property. Meanwhile expenditures were practically stationary. That a "sinking fund" was of little avail unless accompanied by a conservative employment of the city's credit, became apparent to some at this time. In 1831 the committee on reduction stated the case in very forcible language. It pointed out that "the creation of new Debt, to an amount equal to the Reduction of the old Debt, seems constantly to paralyse the efforts of that system, which this Committee has been appointed to administer."² "Such a course," the committee goes on to say, "not only diminishes the hopes of the ultimate payment of the City Debt, but it diminishes, also, the means by which it was ever thought possible to pay it; — as there is a constant diminution of the resources of the City in its Lands, its Bonds, and Notes, without a corresponding reduction of its Debt." The committee requested the city council to consider very carefully in the future whether some undertakings for which loans had been negotiated in the past were not objects "of a nature to be brought within the sphere of regular annual Income; — and whether they may not be justified in meeting them, by an increase of the annual Tax." During the past two years the city had made a number of "reduction loans," thus renewing old debts; it had also made loans to cover a deficiency in the appropriation of the fire department, and one for street paving.

This liberal use of the city's credit in time of stable expenditure was naturally much extended in the upward movement which began in 1832 and lasted until 1839. The following account will serve as an illustration of the way in which short-time loans, incurred for objects of little permanence, were definitely incor-

¹ *Auditor's Report* (1830), p. 43.

² *Ibid.* (1830), p. 48.

porated in the city debt. The payment in 1831 of a number of one-year loans contracted in 1830 necessitated the carrying over to 1832 of a part of the loan in anticipation of taxes. The repayment of that and other loans falling due in 1832 required a twenty-year reduction loan of \$53,000. Among the loans of 1833 was a deficiency loan of \$71,000 for one year; though this was ostensibly repaid in 1834, it was really incorporated in a loan of \$450,000 made for the "purposes of the then current financial year."¹ The larger part of this last loan was paid in 1835 out of the proceeds of a twenty-year reduction loan of \$500,000. This system of funding the debt in long-time redemption loans naturally tended to obscure the purposes for which it was contracted. Further obscurity resulted from the adoption in 1834 of the method of borrowing in a lump sum "for the purposes of the then current financial year."²

On March 10, 1834, greater permanence was given to the provisions of the order of 1827 by the passage of an ordinance.³ No changes were made in the old order, except that the committee on reduction was given power to loan on interest to the treasurer of the city any balance not needed for the time being.

The magnitude of the debt, which in 1835 amounted to over \$1,000,000, called forth very serious comments from Mayor Lyman. Though he admitted that it was not yet of an amount "to awaken the least uneasiness in a City of the extent and opulence" which Boston possessed, yet he believed that a question might arise "how far it is just and wise to impose on posterity the whole labour and burthen of paying for improvements which the present generation have effected."⁴ "Some of those operations," Mayor Lyman went on to say, "that we undertake because in our judgment they are for the public good, may not be viewed in the same way by our posterity."⁵ As an example, he pointed to the last court house, erected in 1822, and now giving way to a new one. He also criticized the policy of looking to the proceeds of land sales for the payment of the city debt, claiming very properly

¹ *Auditor's Report* (1834), p. 49.

⁴ *Mayors' Inaugurals*, i, p. 180 (1835).

² *Ibid.* (1834), p. 58.

⁵ *Ibid.*, p. 181.

³ *City Ordinances* (1834), p. 295.

that this method amounted to a transfer of property rather than a reduction of debt.

From 1832 to 1839 the debt advanced from \$641,000 to \$1,502,000, a rise of \$861,000. "Sinking fund" payments in this same period amounted to about \$400,000, \$105,000 of this being paid from taxes and \$240,000 from sales of property. The "sinking fund" had retarded the growth of the debt by about one-third. Only one-quarter of the "sinking fund" came from taxes, the rest from the very uncertain source of land sales and annual balances. Thus in 1838 the payment of \$15,000 toward the extinction of a debt of \$1,500,000 meant an appropriation of only one per cent from ordinary receipts. In 1838 the interest charge was \$82,742, adding 13 per cent to the expenditures of the city. This burden was not as heavy as in 1827, when the payment of \$52,257 increased the expenditures 17 per cent.

In his inaugural of 1839 Mayor Eliot recommended an increase in the regular appropriation for the reduction of the city debt. "Every year," the Mayor said, "there appears in the accounts a provision for diminishing a debt, which, notwithstanding that provision, continues to increase."¹ He believed that the city council should make a real debt reduction from the proceeds of a higher tax rate. The committee of finance was intrusted with the task of considering "the expediency of appropriating the sum of \$50,000 annually for the reduction of the City debt." Its report after clearly stating the present situation, presented a very definite financial policy for the consideration of the city council.²

The committee found extraordinary expenditures had been met wholly by means of loans. "There seems to have been a vague impression," the report adds, "of an indefinite and growing value in the available City property, of which posterity were to have the benefit, and that therefore there was little danger of loading them with too heavy a burden of taxation."³ The committee believed that taxation should provide for a part of the unusual expenditure. Extraordinary expenditures should be classed in accordance with their permanence. The percentage of the cost

¹ *Mayors' Inaugurals*, i, p. 238 (1839).

³ *Ibid.*, p. 3.

² *City Documents*, no. 12 (1839).

met by taxation should vary with the class. Taxation should contribute annually to reduction a sum not less than three per cent of the city debt.

A resolution was, accordingly, passed in 1839, stating that a sum of not less than three per cent of the city debt ought to be annually appropriated to its reduction.¹ In compliance with this resolution, the appropriation from taxes was increased to \$45,000 in 1839. The debt, however, made a net gain of \$24,000.

But with 1840 there appeared a mayor, who was to make a successful stand against further increase of the debt. The first year of the administration of Jonathan Chapman saw the usual addition to the debt. But in the next two years he succeeded in reducing the debt \$189,000. Only \$30,000 of this amount came from sales of city property. The work of Jonathan Chapman was continued by his successor, Martin Brimmer. Under Mayors Chapman and Brimmer the debt was reduced from \$1,573,000 in 1841 to \$784,000 in 1845, the repayment of \$789,000 representing a diminution of 50 per cent in four years. From May 18, 1840 until July 1, 1844, no loan was made outside of those in anticipation of taxes.

Mayor Chapman gave his reasons for reduction in his first inaugural. Experience had convinced him of the folly of looking to land sales as a source of liquidation. He stated that "unless a different course . . . is pursued for the future, a large proportion of the principal of the debt, if it be suffered to increase, may eventually be left without means of payment, excepting by the sale of public property . . . or by taxation." In his opinion, "The system of internal improvement, important as it is within strict limits, and when gradual in degree, has yet been pushed too rapidly in many parts of our country, . . . and it may be too much to have been expected, that our own City should wholly have escaped the contagion."² Mayor Chapman believed it was time to pause. "For the present," he affirmed, "the luxuries of life must be dispensed with, and a rigid confinement enforced to its simple necessities." The Mayor recommended as the cardinal point of his administration "not merely a prevention of the

¹ *Mayors' Inaugurals*, i, p. 248 (1840).

² *Ibid.*, p. 247 (1840).

increase but a positive and gradual reduction of the City debt." ¹ He would not be satisfied with any reduction short of the amount annually set apart for that purpose. The Mayor asked for a permanent ordinance embodying the resolution of 1839

On December 28, 1840, Mayor Chapman secured the passage of his desired ordinance. This provided that "in every future year there should be appropriated from the Annual City Tax, for the payment, or the purchase of the principal of the City Debt, a sum that should not be less than three per cent on the amount of the Debt, nor less than Fifty Thousand Dollars." ² The Mayor's policy consisted in keeping down expenditures, in maintaining the tax rate and in applying the surplus receipts to the payment of the city debt. In his second inaugural he said that the prevailing period of depression had made it comparatively easy to retrench in the department of expenditures. He expressed the fear, however, "that a season of returning prosperity which seems close at hand, may make it a harder trial to hold back." ³

The revival of business, which the Mayor predicted, is shown by the increase of receipts from sales of property from \$12,961 in 1842 to \$96,560 in 1843 and \$118,443 in 1844. These aided considerably in the work of reduction. The amount held in the treasury for the payment of the debt reached \$181,000 at the beginning of the financial year 1844. ⁴ It was a novelty for the city to have a surplus exceeding the requirements of the debt falling due. Obligations to the amount of \$46,000 were, accordingly, purchased before maturity at a premium of \$960. ⁵ This procedure was new to the city

The period closed with a debt of \$784,000, a little over \$7 for every inhabitant. The outlook for its complete extinction was good. After eighteen years of almost constant borrowing, the policy of the government suddenly changed. After 1840 it was the avowed policy of the government not only to pay all expenditures from taxes but also to appropriate large sums for debt reduction. In his report for 1844 the auditor mentioned the popular

¹ *Mayors' Inaugurals*, i, p. 248.

² *Auditor's Report* (1844), p. 78.

³ *Mayors' Inaugurals*, i, p. 265 (1841).

⁴ *Auditor's Report* (1843), p. 10.

⁵ *Ibid.* (1844), p. 26.

inquiry as to why the tax rate was still maintained when such large surpluses remained in the treasury each year. His reply was that "it is now the settled Policy of the City to make every year pay its own expenses, besides contributing Fifty Thousand Dollars toward the reduction of the City Debt."¹

FINANCIAL POLICY

The material for a review of the changes in financial policy has to a large extent already been given. The bringing together in one story of these scattered threads may help, however, to give a better picture of the finances of Boston in the years 1822 to 1844.

The first mayor was John Phillips, "a man of strict integrity and general good judgment."² For twenty-five years he had served in the state legislature, ten of these as president of the Senate.³ The policy of his administration was to keep things practically as they were under the selectmen. Accordingly, the few changes made were confined to the organization of the various departments in compliance with the provisions of the city charter. The change from town to city government was easier because of this first year of conservatism.⁴ Expenditures increased, however, due to greater appropriations for general government and schools.

But those who had worked for the charter wished to see its powers used to develop the city. In Josiah Quincy they found a man well-fitted for this purpose. When he finally withdrew from office at the close of the year 1828, he left Boston vastly improved. The high quality of service he required set a standard for succeeding administrations.

Small as were the powers conferred upon the mayor by the charter, in the hands of men like Mayor Quincy and many of his successors they counted for much. The amount of work the

¹ *Auditor's Report* (1844), p. 7.

² *Memorial History*, iii, p. 224.

³ Quincy, *Municipal History*, p. 55.

⁴ The names of the mayors and the years of their administrations will be found on page 381 of the Appendix.

second Mayor put into the great Faneuil Hall extension was tremendous. To accomplish this improvement, he was obliged to convince the citizens of the wisdom of going into debt for extraordinary objects. The reorganization of the health and fire departments and the institutions was due to his zeal. During his administration a beginning was made on much-needed street improvements. A number of streets were widened and repaired and all were subjected to a very thorough cleaning.

But these improvements took money, as the rise in expenditures from \$240,604 in 1822 to \$351,314 in 1827 shows. Since the city council did not consider it advisable to raise the tax rate, the ordinary receipts of the city did not keep pace with expenditures. To meet this deficiency the creation of a debt was necessary. This would have been much larger but for the very successful financial outcome of the Faneuil Hall extension. Because of this profitable venture the debt incurred by Mayor Quincy's administration does not seem too large. It is hard to understand, however, why the new city government persisted throughout the first decade in maintaining a tax rate lower on the whole than that employed by the selectmen during the last ten years of the town. Very likely the city council did not realize the magnitude of the forces that were as time went on to demand more and more municipal conveniences. Moreover, they were finding that it was easier to borrow than to tax.

The last two years of Mayor Quincy's administration found the people anxious for a rest. In these years the receipts slightly exceeded the expenditures, making possible a reduction in the debt.

In 1829 Harrison Gray Otis was elected mayor. His three years, which completed the period of rest, were devoted to maintaining the standards set by Mayor Quincy. The conservative policy of the city council at this time is shown by its willingness to make the old State House suffice for a city hall.¹ Although the tax rate was raised slightly, surplus receipts were prevented by a commercial depression, attributed by Mayor Otis to the excessive investment of capital in manufactures.² The valuation of assessable

¹ *Memorial History*, iii, p. 235. ² *Mayors' Inaugurals*, i, pp. 133, 134 (1830).

property had declined from \$65,858,000 in 1827 to \$59,586,000 in 1830.

In the years 1832 and 1833 Charles Wells, a master builder, was mayor of Boston. His election was a protest by the middle class against the scale of municipal economy inaugurated by Quincy and maintained by Otis.¹ But, instead of returning to the narrow economy of the town, his administration was forced by the great prosperity of the early thirties to make even larger expenditures. The expenditures rose from \$330,807 in 1831 to \$604,399 in 1833; and the debt, in spite of a higher tax rate, mounted from \$641,000 to \$924,000. The great events of his administration were the erection of a new court house and the extension of Broad, Commercial and Tremont Streets. Borrowing for ordinary expenditure became frequent.

In 1834 and 1835 Theodore Lyman, Jr., a very able mayor and a man of great philanthropy, held office.² The upward movement begun in 1832 continued unchecked throughout his administration. Expenditures rose from \$604,399 in 1833 to \$701,611 in 1835, and the debt increased from \$924,000 to \$1,082,000. Mayor Lyman was much opposed to borrowing for ordinary expenditures, and believed that part of the cost of extraordinary objects should also be paid out of taxes. His protest secured increases in the tax rate from \$4.25 in 1833 to \$4.70 in 1834 and \$4.85 in 1835. Among the accomplishments of Mayor Lyman's administration were the erection of a well-equipped house of reformation, the expenditure for primary school buildings and the widening and repairing of many of the business streets.

Samuel Turrel Armstrong served a single year, 1836. With his retirement the upward movement came to an end, with expenditures of \$816,913 and a debt of \$1,279,000. The increase of \$115,000 over the expenditures of 1835 was due to still greater activity in widening and extending streets and to the building of an iron fence around the Common. This last appropriation shows clearly the effect of prosperity upon the finances of the city. The tax rate for 1836 was \$4.75.

¹ *Memorial History*, iii, p. 236.

² *Ibid.*, p. 236.

Samuel Atkins Eliot was thrice elected mayor. The crisis of 1837 brought retrenchment in the first two years of his administration. In these years the Mayor succeeded, however, in accomplishing without large expenditure the reorganization of the police and fire departments. During the brief return of prosperity in 1839 a building was erected for the offices of registry and probate and a very large sum expended in the widening and extending of streets. The expenditures for this year rose to \$841,028, the highest point since the year 1826 which saw the completion of the great Quincy Market. The tax rate for 1839 was raised to \$5.65. The debt increased during the three years from \$1,279,000 to \$1,526,000. Mayor Eliot's opposition to borrowing resulted finally in the adoption of the resolution of 1839.

Jonathan Chapman, mayor from 1840 to 1842, introduced a new policy. Hard times gave an excuse for retrenchment but the kind of retrenchment proposed by the Mayor differed from that practised in previous periods of depression. While he favored a reduction in expenditures, he insisted that the high tax rate of 1839 should be maintained and even increased. The adoption of his suggestion gave the city in 1841 its first real surplus. The policy of the Mayor is seen further in his opposition to the building of a city hall and his furtherance of the project by which the old court house was transformed at moderate cost into a suitable home for the city government. The three years of Mayor Chapman's administration saw the debt reduced by \$142,000. Though the amount paid off was not large, the service rendered the city was great. The Mayor's work made much easier the repayment of still larger portions of the debt under his successors.

The slight increase of the tax rate from \$5.70 in 1842 to \$6.20 and \$6.00 in 1843 and 1844, respectively, together with a remarkable growth in land sales, made possible the continued reduction of the debt under Martin Brimmer. During the two years of his administration he succeeded in paying off \$600,000.

In the first period under the charter the task of supplying the needs of the city was well performed. Boston had obtained, as the result of greater expenditures, better service and conveniences not known under the town. The chief criticism of the financial

policy down to 1840 is that it relied too much on borrowing. From 1840 to 1844, however, the principles which guided the city government cannot be too highly commended. In the face of a commercial depression the tax rate had been maintained, and one-half the debt paid off. The period closed with the finances of the city in excellent condition.

CHAPTER III

THE BUILDING OF THE WATERWORKS, 1845-1859

GOVERNMENT

THE charter of 1822 remained in force with but little change until the revision of 1854. Chapter 448 of 1854 was passed in answer to the popular demand that the mayor be given greater power. The new charter placed him outside the board of aldermen, but gave him a veto over all acts of the city council and all acts of either branch which involved an expenditure of money.¹ This power was qualified by the provision that a two-thirds vote could pass a bill over the mayor's veto. Moreover, he was not permitted to disapprove separate items in an appropriation order or loan bill.² His power of appointment was practically confined to the police, and this was subject to the approval of the board of aldermen.

Far from increasing the power of the mayor, the charter of 1854 reduced his authority considerably. The provisions of the act had been drafted under the direction of the city council which, naturally, would not limit its executive power. The charter even increased the power of the council, establishing still more firmly government by committee.³ The number of aldermen was increased from eight to twelve. Though the description of his functions by Mayor Prince as "merely advisory"⁴ seems too strong a statement of the case, there can be no doubt that the charter of 1854 made executive responsibility even less possible.

EXPENDITURES

The relative increase in expenditures was much greater in the second period than in the first. At the beginning of the Civil War the expenditures of Boston were on a municipal basis; the town economy had been left far behind. During this period many

¹ *City Documents*, no. 120 (1884), p. vii.

³ Ernst, *Constitutional History*, p. 151.

² *Ibid.*, no. 220 (1894), p. 168.

⁴ *Mayor's Inaugural* (1881), p. 8.

expenditures, hitherto extraordinary, became normal, on account of their annual recurrence.

Expenditures still followed the commercial cycles. The first period of growth began with 1845, when expenditures rose from \$791,292 in 1844 to \$974,102 in 1845. The introduction of water and expansion in other branches carried the total expenditures of the city to \$3,378,944 in 1848. Then came five years of rest, coincident with a period of comparative depression. The return of prosperity carried expenditures from \$2,241,135 in 1853, the last year of retrenchment, to \$3,739,554 in 1857, the highest point before the War. The effect of the panic of 1857 is seen in the decline to \$3,399,215 in 1858. From approximately \$7.00 in 1844 the per capita expenditure rose to \$17.60 in 1850 and \$20.00 in 1859.

General Government. Expenditures for general government increased gradually, rising from \$49,499 in 1845 to \$112,457 in 1859. They decreased in importance from 8.5 per cent of all expenditures in the period 1840 to 1843 to only 3.5 per cent in the years 1854 to 1857. The per capita figure changed but slightly.

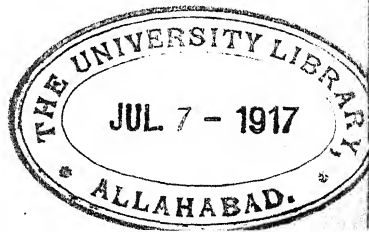
Salaries increased from about \$37,000 in 1844 to \$55,000 in 1849 and \$78,000 in 1859.¹ After 1840 individual salaries rose in response to the very apparent advance in the cost of living. The mayor's salary remained at \$2,500 until 1852 when it was raised to \$4,000.² The members of the city council received no pay. In 1846, however, in response to the feeling that the great executive duties of the aldermen deserved compensation, a joint committee recommended that they be given salaries of \$1,000.³ This was not done.

The first extraordinary expenditure occurred in 1848 when work was begun on a new jail. The events leading up to this expenditure make a long story of changing policy and indecision. Only ten years after its completion, a state commission had condemned the old jail as badly constructed, insecure, allowing no separation of

¹ The real increase in the fifties was even greater than the figure for 1859 shows. In 1856 salaries of county officers, amounting to \$10,567 in that year, were transferred to the head of county expenditures.

² *Auditor's Report* (1852), p. 78.

³ *City Documents*, nos. 17 and 31 (1846).



classes and giving no chance for employment.¹ Yet at the time it was built it was regarded as a model jail, a circumstance illustrating the rapid advance made in the science of prison construction. In 1837 Mayor Eliot had recommended a new building on a site further removed from the center of the city.² Thereafter the question received the attention of successive city councils, one plan being formulated only to be put aside in favor of another, until in 1845 an appropriation was voted to be used in erecting a jail on the city's lands in South Boston.³ This scheme was given up, however, in deference to the protest of the inhabitants of this section.

It was left for Mayor Josiah Quincy, Jr., who was endowed with much of his father's energy, to settle the question in 1848. He persuaded the council to erect a new jail on Charles Street. The estimates called for an appropriation of about \$260,000.⁴ Work had scarcely begun, however, when Quincy's successor, Mayor Bigelow, who stood for retrenchment, secured the suspension of construction for three months. He wanted the council to remodel the old jail building. Though unsuccessful in this, he did secure important modifications in the plan for the new structure.⁵ And yet the jail, completed in 1851 on a scale more modest than was at first intended, cost almost \$450,000!⁶

Police. Police expenditure continued in this period the growth begun in the thirties. The increasing size of the city and the introduction of the foreign element made necessary larger expenditures. The sudden increase from \$57,667 in 1844 to \$73,351 in 1845 recorded a reorganization of the department. The number of the force was increased,⁷ and night police under the control of the city marshal and independent of the old watch were appointed.⁸ After 1847 the police force proper became a much more important part of this double-headed system.

¹ *City Documents*, no. 18 (1845), p. 8.

² *Mayors' Inaugurals*, i, p. 215 (1837).

³ *City Documents*, no. 24 (1845).

⁴ *Mayors' Inaugurals*, i, pp. 369, 370 (1849).

⁵ *Ibid.*, i, p. 400 (1851).

⁶ *Auditor's Report* (1851), p. 141.

⁷ *Memorial History*, iii, p. 252.

⁸ *Auditor's Report* (1847), p. 5.

Increase in individual salaries, as well as in the number of the force, contributed to the growth of police expenditures after 1849. In 1849 the wages of the constables of the watch were raised from \$1.00 to \$1.25, and the pay of the men was increased from \$0.90 to \$1.00.¹ In the early fifties the pay of both the night and day police was raised to \$2.00. The expenditure for police had risen by 1853 to \$139,391. In 1854 the consolidation of the watch and the police under a chief of police carried the expenditures to \$173,895.² Almost as great an increase came in the following year. This rise was due partly to the appointment of new members, and partly to the erection of station houses.³

Police expenditures rose slightly during the remaining years of the period. The department was now adequate for the needs of the city. In 1856 the police force consisted of 246 men or one policeman for every 650 of the inhabitants.⁴ Police expenditure in the years 1854 to 1857 constituted 7 per cent of the total expenditures of the city. The per capita figure for this same period was \$1.24. In 1858 the uniforming of the police made them decidedly more useful to the public. Many protested, however, that such livery was not in keeping with the ideals of a democratic people.⁵

Fire. With the prosperity of the latter forties there came an increase in expenditures for fire protection. Expenditures rose abruptly from \$44,272 in 1844 to \$74,563 in 1845, an increase due partly to the erection of new engine houses and reservoirs, and partly to an increase in individual salaries. The pay of the "privates" was raised in 1845 from \$65.00 to \$80.00,⁶ to be followed in 1851 by a still further increase to \$100.⁷

With 1848 there came a pause in the upward movement of expenditures. The introduction of water in 1849 made the building of reservoirs unnecessary.⁸ But few engine houses were constructed during the next four years. The increase in the expenditure of the fire department proper from \$61,790 in 1850 to

¹ *Auditor's Report* (1849), p. 67.

² *Memorial History*, iii, p. 259; *Special Laws*, ix, p. 741 (May 21, 1853).

³ See Appendix, p. 354.

⁶ *Auditor's Report* (1847), p. 36.

⁴ *Auditor's Report* (1855), p. 103.

⁷ *Ibid.* (1851), p. 33.

⁵ *Memorial History*, iii, p. 263.

⁸ See Appendix, p. 356.

\$77,755 in 1851 was due to an appropriation of \$15,700 for a new system of telegraphic fire alarms.¹ This device, invented by Dr. William F. Channing, a citizen of Boston, proved from the very first its great usefulness. In March, 1855, the city purchased its first steam fire engine which was for some time regarded as a failure.² It was not until 1858 that the auditor's report records the purchase of two more engines,³ followed in 1859 by the purchase of four at a cost of \$10,500.⁴

The expenditures of the department increased rapidly toward the end of the fifties, \$132,267 being spent in the last year of the period. In the years 1854 to 1857 the expenditures for fire protection constituted 3.7 per cent of the total city expenditures. The per capita figure was \$0.63.

Institutions. Expenditures for institutions rose steadily from \$80,515 in 1845 to \$248,496 in 1850 and, after a few years of rest, to \$303,475 in 1857 when further retrenchment occurred. In the years 1854 to 1857 the institutions demanded 9 per cent of the total expenditures of the city.

Boston, according to contemporaries, was as early as 1838 spending too much on her paupers. The system of disbursements by overseers was one cause of the increasing burden. Another cause was the fact, mentioned as late as 1859, that the poor laws of Massachusetts were much less strict than those of the other New England states. Most of these states gave no support to those unable to claim settlement in some town in the state. Consequently, a large class of inefficient persons were invited to Massachusetts by a law which recognized these homeless people as state paupers. Many of them gained settlement in Boston, thus increasing the number of her dependents.⁵

Still another cause, more important in this period, was the increasing number of foreign poor, chiefly from Ireland, that from the thirties onward became dependent on Boston. The seriousness of the situation was pointed out as early as 1835 by Mayor Lyman. He stated that in 1829, of the total number of inmates

¹ *Auditor's Report* (1851), p. 32.

² *Ibid.* (1855), p. 45.

⁵ *City Documents*, no. 27 (1859), pp. 4, 5.

³ *Ibid.* (1858), p. 50.

⁴ *Ibid.* (1859), p. 58.

admitted to the house of industry, 386 were Americans and 284, foreigners; in 1834 but 340 were Americans and 613, foreigners.¹ The situation was relieved somewhat by the enactment of the alien passenger laws.

These laws could not seriously check, however, the extraordinary arrivals during the last of the forties, particularly during the Irish famine. Shiploads of starving people came to Boston in 1847 and 1848, bringing pestilence from crowded vessels. In the months of April and May, 1847, four hundred were received into the house of industry. When that was filled to overflowing, temporary quarters were erected on Deer Island.² While it is true that a considerable part of the cost of housing these unfortunates was repaid by the state, a good share fell upon Boston. The temporary influx led to the expenditure of very great sums in the erection of larger institutions, appropriations which subsequent events did not entirely justify. In 1853, out of 1,300 lodged in the house of industry, only 100 had a legal residence in Boston.³ With the fifties the tide of immigration fortunately turned; fewer came and the character of the immigrants was much improved.

The history of the institutions during the period is one of misfortune. This was due partly to causes beyond the control of the city, and partly to the failure of the city council to pursue a consistent plan. By 1841 the house of reformation had so declined in numbers, owing to the disinclination of the courts to commit children to its care, that it was combined in that year with the house of industry. Then, after a time, the commitments increased, making a readjustment once more necessary. The overcrowded condition of the house of industry and its antiquated appointments led the city council at the beginning of this period to consider seriously the question of enlarging the plant.⁴ In 1847, before anything had been definitely decided, a new difficulty appeared in the declaration of independence by the inhabitants of South Boston.

¹ *Mayors' Inaugurals*, i, pp. 191, 192 (1835).

² *City Documents*, no. 17 (1848), pp. 3-5.

³ *Mayors' Inaugurals*, ii, p. 30 (1853).

⁴ *City Documents*, no. 19 (1846), pp. 3, 4.

In a memorial to the city council the people of South Boston asserted that they had always been treated as a dependency.¹ That, although they were 12,000 in number and had real and personal property amounting to six millions of dollars, their wants received no attention. That after their annexation in 1804 Boston, influenced by the owners of land on the "Neck," who wanted to exclude competition, had built the South Boston bridge so far up the channel that it was of small service to the people of the annexed territory. It was not until 1828 that a bridge was built where it was needed. Even then it had to be erected at the expense of proprietors of land in South Boston and presented by them to the city. This improvement had much to do with the remarkable growth of the section which followed. At present, the memorial asserted, South Boston was very much in need of a bridge and avenue still further down the channel. They complained that their streets remained unaccepted by the city, that grades had not been established; in fact, that practically nothing had been spent for their benefit. But the grievance which hurt them most was the fact that their abode had been treated as "the Botany Bay of the City, into which could be thrust those establishments which the City Fathers would consider nuisances in the neighborhood of their own private dwellings."² The memorial closed with a threat of municipal independence, if their wants were not supplied. What interests us most in this connection was the demand that the city institutions be removed to "one of the islands in the harbor."³

That the memorial was largely true in its statements was admitted by the committee, to which the document was intrusted.⁴ Boston hastened to conciliate her angry citizens, as the appropriations for South Boston projects during the next few years prove. Commissioners were at once appointed to fix the grades of the streets;⁵ plans were made for establishing a new school there;⁶ and the purchase of Washington Heights, to be used as a park, was recommended by a committee and subse-

¹ This memorial is found in *City Documents*, no. 18 (1847).

² *City Documents*, no. 18 (1847), p. 3.

³ *Ibid.* 18 (1847), p. 17.

⁴ *Ibid.*, no. 29 (1847).

⁵ *Ibid.*, no. 42 (1847).

⁶ *Ibid.*, no. 32 (1847).

quently carried out at a cost of \$112,000.¹ In the same year a committee gave great satisfaction to the inhabitants of South Boston by advising the city council to transfer the house of industry to Deer Island.²

The new almshouse on the island was not authorized until July, 1849.³ In the meantime, counter proposals for enlarging the South Boston plant were discussed. Many thought too much had been spent there already to warrant its abandonment. From 1840 to 1846 hospitals had been erected at South Boston for the houses of correction and industry; in 1846 \$21,432 was spent in enlarging the lunatic hospital. It was feared that the land, made vacant by the removal of the institutions, could not be advantageously sold. But the many opponents of the project were unable to prevent its inception.

The new almshouse, a large brick structure, was erected during the years 1849 to 1852 at a cost of \$184,000.⁴ The inmates of the old building at South Boston were then removed to the new home on the island. This at first sheltered 1300 persons.⁵ But its prosperity was short-lived, for in 1854 the state began to care for her own paupers. The removal of the larger part of its inmates, for all but a very few were state paupers, was a great blow to the house of industry. Presently, Boston found her large, well-equipped building practically without tenants.

To meet this situation the city council at first decided to make over the structure for a house of correction. Large sums were, accordingly, expended during 1855 and 1856 in refitting it for that purpose. The paupers were removed to inadequate wooden buildings on the island. But in 1856 indecision again appeared, when over \$3,000 was spent on a workshop for the house of correction at South Boston. This determination to enlarge the South Boston plant meant the abandonment of the scheme for utilizing the new almshouse.⁶

The desire to make some use of the new house of industry, which, if left to itself, would, in its unsheltered situation, have

¹ *City Documents*, no. 29 (1847).

² *Ibid.*, no. 39 (1847).

³ *Ibid.*, no. 70 (1851), pp. 4, 5.

⁴ *Auditor's Report* (1851), p. 147.

⁵ *Mayors' Inaugurals*, ii, p. 30 (1853).

⁶ *City Documents*, no. 27 (1857), p. 6.

fast succumbed to the elements, led Mayor Rice to recommend a further plan. In his inaugural for 1857 he advised fitting up the wings of the building for the reception of the paupers and of the inmates of the house of reformation. For the sake of economy, he also recommended placing these institutions, as well as the house of correction and the lunatic hospital, under one management.¹ The Mayor's plans met the approval of the city council. In the same year an act was secured, giving the council power to elect annually twelve men as directors of the department of institutions.² In 1858 the house of reformation and the house of industry were both brought under the same roof on Deer Island. The old home of the former was sold, and the land was placed in the hands of the land commissioners.³ Thus the period closed with the promise of greater efficiency in the department.

Beginning with 1855, items appear regularly in the miscellaneous column. These record the purchase of a harbor steamer in 1855 to be used by the Deer Island establishment in place of the former sailboat, and include its annual cost to the city. The extraordinary figure for 1857 tells of an unsuccessful attempt to establish a city hospital. This project, first seriously advocated during the last visitation of the cholera in 1849, was adopted by the city council in 1857 and \$45,000 appropriated for the purchase of the newly erected Boston Lying-in Hospital.⁴ But the opposition of owners of property in the neighborhood frustrated its opening, and caused the city to re-sell the property.

Public Grounds. Expenditures for parks and public grounds assumed greater importance during this period. From an average expenditure of \$4,028 in the years 1840 to 1843, only 0.6 per cent of the total expenditures of the city, they rose to \$38,275 in the period 1854 to 1857, or 1.4 per cent of the city's expenditures. The increase in per capita figures was from \$0.04 in the former period to \$0.24 in the latter.

The rise in expenditures for parks began almost with the opening of the new period. Considerable impetus was given the

¹ *Mayors' Inaugurals*, ii, p. 136 (1857). ² *Special Laws*, x, p. 647 (ch. 35 of 1857).

³ *Mayors' Inaugurals*, ii, p. 172 (1859).

⁴ *City Documents*, no. 67 (1860), pp. 3, 4; *Special Laws*, x, p. 820 (ch. 113 of 1858).

movement by Mayor Josiah Quincy, Jr. In his inaugural of 1847 he emphasized the importance of parks, urging the city council to coöperate with private citizens in ornamenting the public squares.¹ The result of his appeal is seen in the little green squares, which one comes upon so frequently in the old residence sections of the city. In 1847 an expenditure of \$112,000 was made for the purchase of Dorchester Heights, in South Boston, to be used partly as a park, and partly as a site for a distributing reservoir of the new water system.² Much larger sums were now spent annually on the Common, the average for the remainder of the period being about \$20,000. The extraordinary figure for 1857 is due to the purchase for \$35,000 of a tract of land outside the city limits to be used as a cemetery.

The course of events, which led to the laying out of a park on the flats west of the Common, introduces us to the subject of the Back Bay improvement. At the close of the period this problem was beginning to affect the financial policy of Boston. The territory between the Common and the town of Brookline was originally a stretch of marsh land, seven or eight hundred acres in all, covered by water at high tide and cut by channels at low tide.³ In 1814 a company known as the Boston and Roxbury Mill Corporation had been chartered to improve the Back Bay. It built two causeways, one westward, the present Beacon Street, then a toll road, and one southward from this first causeway to Roxbury. The latter dam divided the Back Bay into two basins, the "full" or western one emptying into the eastern or "receiving" basin, and allowing the construction of tide mills along the causeway. In 1824 a second company, the Boston Water Power Company, received a charter, and by 1832 had acquired all the real estate and privileges of the Boston and Roxbury Company south of the Beacon Street Causeway. In 1827 the city had entered into an agreement with the Water Power Company, ceding to it about one hundred acres in the Back Bay in return for the privilege of draining into the receiving basin.⁴ The Water Power Company

¹ *Mayors' Inaugurals*, i, p. 349 (1847).

² *Auditor's Report* (1847), pp. 6 and 55.

³ *Senate Documents*, no. 45 (1852).

⁴ *Mayors' Inaugurals*, ii, pp. 129-134 (1837).

agreed to keep the water in the basin always below a certain level, a level necessary for the working of the tide mill.

But the use of tide power proved unprofitable, and by the end of the forties the company had become very negligent in keeping the water below the prescribed level. As a result, the receiving basin became an abiding place for the sewage of a rapidly growing district, a situation menacing to the health of the city. Moreover, the grade of the city lands on the Neck had been established in relation to this false level. Fortunately for Boston, however, the increasing value of land finally induced the Water Power Company to fill in the Back Bay.

By the ordinance of 1641, the right of individuals to shore land extended to the low tide level, provided the uncovered strip was not over one hundred rods in extent.¹ All below that, "the soil of the sea," belonged to the commonwealth. Down to the forties, the state had been very liberal in granting to Boston and to individuals the right of encroachment on the harbor. In this period, however, a conservative attitude was adopted. The commonwealth wished to keep its title to lands, rapidly becoming valuable. It also feared that unrestricted filling in would in time so diminish the daily flow of water as to endanger the ship channels. Consequently, in 1852 the commonwealth asserted its title to all lands in the Back Bay, "below the ordinary line of riparian ownership."² It then proceeded to adjust the various conflicting interests in the territory, preliminary to carrying through a scheme for its improvement.

In 1856, the Boston Water Power Company was converted by the legislature into a land company, and made a partner by the commonwealth in the great undertaking of filling in the Back Bay.³ Vigorous pressing of its demands finally secured for the city a recognition of its claims. By an indenture of December 11, 1856, made between the state, the Water Power Company and the city of Boston, the commonwealth agreed to cede to the city a strip of land west of the old Ropewalk estate at the bottom of the

¹ *Senate Documents*, no. 45 (1852), p. 21.

² *Special Laws*, ix, p. 538 (ch. 253 of 1852).

³ *Mayors' Inaugurals*, ii, p. 131 (1857).

Common and to build a main sewer across the Back Bay lands to the Charles River. Boston, in turn, promised to share with the commonwealth the cost of constructing an avenue eighty feet wide from Beacon to Boylston Street, the present Arlington Street.¹ A subsequent act provided that no buildings should be "erected between Arlington and Charles Streets, except such as are expedient for horticultural purposes: provided, that nothing herein contained shall render it unlawful to erect a city hall on the Public Garden."² Thus the Public Garden came into existence.

Streets. Expenditure for streets and kindred objects was the first to respond to the wave of prosperity in the forties. From \$173,186 in 1844, the last year of retrenchment, it rose to \$277,218 in 1845 and \$590,850 in 1848.³ This point was not reached again until the next period of expansion, which carried expenditure for streets to \$709,568 in 1855 and \$1,324,591 in 1857. In the period 1854 to 1857 this branch constituted 33.8 per cent of the city's expenditures, a per capita expenditure of \$5.71.

Streets Proper. After the rest in the early forties there began in 1845 a very decided movement for the widening and extension of streets. This, accompanied by like activity in the paving department, raised expenditures from \$95,840 in 1844 to \$364,567 in 1848. The very rapid growth of the city at this time and the consequent increase in real estate values made the widening of a street an expensive undertaking. If Boston had enjoyed during this period the privilege of levying special assessments, a very large burden would have been avoided by the city, and her streets today would be in much more satisfactory condition. The gravity of the situation was especially realized during the administration of Josiah Quincy, Jr., and an appeal was made to the legislature in 1846 for the power of assessment.⁴ The bill was defeated, however, according to the committee of finance, "by the exertions of interested men, and by the opposition of some of the representatives of the City."⁵

¹ *City Documents*, no. 59 (1857).

² *Special Laws*, x, p. 917 (ch. 210 of 1859).

³ See Appendix, p. 360.

⁴ *Mayors' Inaugurals*, i, p. 324 (1846).

⁵ *City Documents*, no. 15 (1846), p. 6.

The system of purchase, besides being at the best very expensive, gave an excellent chance for the wasteful use of the city's money. Mayor Lincoln, in his inaugural of 1859, referred to the fact as common knowledge that interested individuals had often advocated improvements which did little public good but raised the value of particular estates at public expense.¹ Almost four millions were spent in widening and extending streets during the first two periods, \$1,231,654 from 1822 to 1844 and \$2,556,433 from 1845 to 1859. A large part of this expenditure was met by loans. A consideration of these figures makes it plain how serious a matter to Boston was the lack of power to levy special assessments for street widening.

To the conservative mind of Mayor Bigelow, the streets were wide enough for all reasonable needs. In his inaugural of 1849 he recommended omitting the usual annual appropriation for the widening and extending of streets. In his opinion a vigorous enforcement of the law against obstructing the streets would gain the desired end without expense. He cited the successful use of this method by the city of London.² That the Mayor's ideas prevailed, is seen by the fall in expenditures for widening from \$198,317 in 1848 to only \$28,414 in 1850. Expenditure for paving did not respond to the demand for retrenchment. As an ordinary expenditure, it was rapidly becoming more important in the long run than the fluctuating expenditure for widening and extending.

The last period of advance in street expenditure began with 1854 and lasted until 1858 when the upward movement was checked by Mayor Lincoln.³ The total figures rose from \$290,-173 in 1854 to \$650,890 in 1857.

Lighting. The rapid growth of the city demanded better illumination of the old streets and the installation of the service in the new. Expenditures rose from \$26,232 in 1845 to \$49,397 in 1848 and \$136,121 in 1859.

That the new lights were largely gas lamps, is seen from the rise in expenditure for new gas fixtures from \$639 in 1844 to \$18,932

¹ *Mayors' Inaugurals*, ii, p. 180 (1859).

³ *Ibid.*, ii, p. 201 (1860).

² *Ibid.*, i, p. 378 (1849).

in 1853. The supplanting of oil by gas was accomplished principally in the years 1851 to 1853. Of the 2514 lamps in use in December, 1851, 1198 were gas and 1316 oil; whereas, of the 3042 in use two years later, 2002 were gas and only 1040 oil.¹

The gas for street lighting was furnished by a company organized in 1823.² At the time of the great street improvements in 1847, Mayor Quincy called the attention of the council to the question of municipal ownership. He stated that the monopoly had been conducted "in a manner entirely satisfactory to the public," the only objection being the partial giving up by the city of its control of the streets. The mayor made no recommendation beyond that of advising a settlement of the matter before the completion of the proposed improvements.³ The city council, however, was content to let rest the question of municipal ownership of gas.

Sewers. Expenditure for sewers rose from \$8,774 in 1844 to \$40,487 in 1859. The land improvements of the latter forties demanded the construction of sewers on a much larger scale.

The providing of adequate sewerage for the Neck presented a serious problem. The receiving basin of Back Bay could no longer be used as a cess-pool. After much deliberation the construction of a large sewer entering South Bay at Dover Street was determined upon. This was built in the years 1850 to 1852, but proved inadequate. The low level of the territory served allowed discharge into the harbor for only a few hours a day. In time of heavy rain the water would back up into the cellars. Recourse was then had to the construction of an additional sewer on Dedham Street in 1857, but this gave no relief.⁴ Then it was realized that but one course remained, and that was to raise the territory to a level sufficient to allow continuous drainage.⁵ The consideration of plans for this stupendous undertaking absorbed the city council at the end of this period.

The increase in the mortality at this time led the city physician to condemn the sewer system. He recommended control by the

¹ *Mayors' Inaugurals*, ii, p. 44 (1853), Farewell Address.

² *Special Laws*, vi, p. 31 (ch. 41 of 1822). ⁴ *City Documents*, no. 64 (1858).

³ *Mayors' Inaugurals*, i, p. 341 (1847). ⁵ *Mayors' Inaugurals*, ii, p. 182 (1859).

city of absolutely all drains. Some private ones still existed. He also objected to the emptying of certain sewers into shoal waters in the vicinity of the docks.¹

Bridges. Throughout the greater part of the period appropriations were made solely for the care and repair of the few small bridges owned by the city. In 1856, however, the construction of the Albany Street Bridge to South Boston was begun. This cost about \$80,000. Other extraordinary expenditures followed: \$56,716 for the purchase of the East Boston Free Bridge,² and \$40,808 for the acquisition of the North Free Bridge.

Ferries. The docks and approaches of the People's Ferry Company and the East Boston Ferry Company were acquired by the city in 1858 and 1859, respectively. The sum of \$125,000 was paid in each case.³ Both companies operated ferries between East Boston and the city proper. These payments were really subsidies to the companies which had found it impossible without charging high tolls to make the returns allowed by their charters. The petition for low rates, made on behalf of the 20,000 inhabitants of East Boston, could not be ignored.⁴ After several years of negotiation, the companies finally agreed to accept a schedule fixed by the board of aldermen, if in return the city would purchase their wharves and approaches.⁵ These, purchased at a figure considerably below their original cost, were leased to the companies for a nominal sum, on condition that they keep them in repair. To this limited extent Boston was forced into the ownership of two ferries at the end of the second period.

Health. Expenditures for public health rose from \$33,807 in 1844 to \$140,288 in 1859. In 1847 the control of the department, placed by the charter in the city council, was transferred to the board of mayor and aldermen.⁶

Public Lands. By 1845, the increasing demand for lands on the Neck and the lack of improved land made apparent the necessity

¹ *City Documents*, no. 9 (1859), pp. 6-8; *Auditor's Report* (1859), pp. 282, 283.

² *Special Laws*, x, p. 524 (ch. 109 of 1856).

³ *Auditor's Report* (1858), p. 104.

⁴ *City Documents*, no. 68 (1857); *ibid.*, no. 83 (1860).

⁵ *Auditor's Report* (1858), p. 104.

⁶ *Special Laws*, viii, p. 798 (ch. 229 of 1847).

of large expenditure. In his inaugural of 1847, Mayor Quincy emphasized the need of putting all lands on the market in a finished condition, referring to the short-sighted policy formerly pursued by the city of selling the lands unimproved, and then being obliged to grade them afterwards at public expense.¹ In 1846, the city council purchased for \$23,936 two hundred thirty-seven thousand feet of marsh land to the east of the Neck, bordering South Bay.² It then proceeded to build a sea wall, and in 1848 contracted with a Mr. Evans for the filling in of these and other adjacent lands. Changes in the plans from time to time necessitated the cancelling of old contracts and the making of new ones, calling for more extensive improvements than those first contemplated by the council.³ Thus, in 1859 the faulty construction of the sea wall rendered necessary the drawing up of a final contract for the completion of the work.⁴ The expenditure for this undertaking greatly exceeded the original estimates, being a little over a million dollars. The land commissioners in 1854 estimated that the addition of interest on this sum would result in a loss to the city, when the land would be ready for market, of \$200,000.⁵

About \$600,000 additional was spent during this period in grading lands and laying out streets on the Neck. The cost of this work was considerably increased by an order of the board of mayor and aldermen in November, 1850, requiring all streets hereafter made to be raised to a grade not less than fifteen feet above low water mark.⁶

The legislative commission of 1850, which advised the state to give up more flats to the city, considered the filling in of South Bay a mistake.⁷ In 1847 the city had asked in vain for title to the flats lying between South Boston and the harbor, later filled in by the commonwealth. The commissioners believed that the city

¹ *Mayors' Inaugurals*, i, p. 340 (1847).

² *Auditor's Report* (1846), p. 36.

³ *City Documents*, no. 82 (1857).

⁴ *Mayors' Inaugurals*, ii, p. 203 (1860).

⁵ *City Documents*, no. 77 (1854).

⁶ *Ibid.*, no. 47 (1851), p. 4.

⁷ *Senate Documents*, no. 3 (1850), pp. 46, 47.

was very short-sighted in pursuing a policy which demanded land at the risk of losing her harbor.

Library. The establishment of a public library dates from 1852, a board of trustees having been constituted in May of that year for the management of the institution.¹ Donations of books and money for this object had been received for the past two years, the largest gift being fifty thousand dollars from Mr. Joshua Bates of London who began his business life in Boston. The donation of Mr. Bates was to be used in the purchase of books, and was given on condition that the city should erect an adequate library building. The city council, accordingly, voted to build a suitable structure. It obtained permission of Mr. Bates to fund his donation, devoting the income alone to the purchase of books. Meanwhile, a temporary home was found for the public library in the Mason Street schoolhouse.²

Authority to spend money for a public library was given to towns and cities by a general act of May 24, 1851 (Chapter 305). This law provided that a town or city might appropriate for the foundation of a library "a sum not exceeding one dollar for each of its ratable polls." Annually thereafter, "for the maintenance and increase" the appropriation could not exceed twenty-five cents for each poll. In 1853, however, a special act gave Boston power to make more liberal appropriations.³ The building, which was erected in the years 1855 to 1857, cost \$363,000. This sum included \$72,888 paid for the lot in 1853.⁴ The ordinary expenditures of the library were from twenty to thirty thousand dollars annually.

Schools. The rapid increase in population in the forties made necessary larger expenditures for schools. The expenditures of the department rose from \$211,238 in 1844 to \$325,913 in 1850 and \$519,031 in 1859. There was a decline in relative importance, however, from 26 per cent of the total expenditures of the city for the period 1840 to 1843 to 14 per cent in the years 1854 to 1857. The per capita figures increased meanwhile from \$1.60 to \$2.39.

¹ *Mayors' Inaugurals*, ii, p. 27 (1853).

² *City Documents*, no. 73 (1853), p. 4.

³ *Special Laws*, ix, p. 584 (ch. 38 of 1853).

⁴ *Auditor's Report* (1857), p. 6.

The building of new schoolhouses both for the primary and the higher schools required large expenditures. The record figure for this object was reached at \$192,539 in 1847.¹

During Mayor Quincy's term larger school buildings were erected and women came to be more generally employed as teachers.² A reaction followed his very liberal policy in schoolhouse construction. Mayor Bigelow, in his inaugural of 1849, lamented the extraordinary cost of some of the new buildings, remarking that "the splendor of the edifice is no guarantee for the education of the pupil."³ The folly of much of this expenditure was seen still clearer a few years later when the movement of population away from the older residence section left the schoolhouses in these neighborhoods with but few pupils. Mayor Smith, in 1855, stated that these buildings were being sold at half the original cost. From this unfortunate circumstance he very naturally drew an argument for cheaper schoolhouses.⁴

The sudden jump in the salaries of primary teachers from \$42,028 in 1845 to \$61,887 in 1846 tells of an advance in their pay from \$250 to \$325.⁵ In 1853 a committee recommended an increase in the pay of teachers to keep pace with an advance in the cost of living, which was estimated as 25 per cent higher than it was in 1840. The report stated that many of the teachers were still receiving the same salary they had obtained sixteen years ago. Meanwhile, in the last seven years, the salaries of teachers throughout the state had risen 17 per cent and those of officers in other departments of the city, 34 per cent.⁶ The result of their recommendation is seen in the rise of the salaries for the grammar school teachers from \$129,166 in 1853 to \$147,022 in 1854. Finally, in 1857, the care of the primary rooms having been assumed by the city the previous year, a sliding scale was adopted for the pay of the teachers in this department. Salaries were to increase from \$300 the first year at the rate of \$50 a year up to the maximum of \$450.⁷ The rate of increase in the better-paid positions in the grammar and Latin schools was not as great.

¹ See Appendix, p. 364 for detailed figures.

² *Memorial History*, iii, p. 254.

³ *Mayors' Inaugurals*, i, p. 369 (1849).

⁴ *Ibid.*, ii, p. 86 (1855).

⁵ *Auditor's Report* (1845), p. 47.

⁶ *City Documents*, no. 54 (1853).

⁷ *Auditor's Report* (1857), p. 83.

The charter of 1854 abolished the old primary school committee and placed the entire management of the school system in the hands of a new committee. This was made up of the mayor, the president of the common council and six citizens elected from each ward, seventy-four members in all. The elected members were to hold office for three years, instead of one as formerly, the first departure from the ancient democratic principle of annual election.¹

Water. In 1846 the city took up the task of supplying her citizens with water. The expenditure of five millions of dollars for this purpose at a time when the ordinary expenditure of the city was from a million to a million and a half a year, represented a very great undertaking for Boston. The annual charge for the running of the water department, including interest on the water debt, averaged in the years 1854 to 1857 \$351,327, or 13 per cent of the total municipal expenditure. It should be remembered that these are figures for gross expenditure, the department being a source of income to the city.

Agitation for city water began as early as 1825. In that year a committee was appointed to investigate the "practicability, expense and expediency of supplying the city with good, wholesome, and soft water." Its report acknowledged the practicability and expediency of the scheme, but doubted the wisdom of the city's incurring the necessary expenditure.² On its recommendation, however, a commissioner was appointed, Professor Daniel Treadwell, who reported in favor of two places, the Charles River above the falls at Watertown and Spot Pond in Stoneham, estimating the cost of procuring water from either source at six or seven hundred thousand dollars. Mayor Quincy, influenced by the experience of Philadelphia, was very much in favor of municipal ownership, and persuaded the city council to withhold its consent to the introduction of water by a group of capitalists, who stood ready to undertake the venture. The Mayor went as far as to secure options on the purchase of water rights both on the Charles and Neponset Rivers. But public sentiment was against

¹ Ernst, *Constitutional History*, p. 114.

² Quincy, *Municipal History*, p. 176.

further increase of the city debt.¹ It had been hard enough for Mayor Quincy to secure the consent of the citizens to the great market extension. Approval of this second piece of extravagance was not to be hoped for.

In the inaugural of Mayor Otis in 1829,² and again in the address of Theodore Lyman, Jr., in 1835 the introduction of city water was strongly urged.³ Mayor Lyman succeeded in obtaining the appointment of a committee, under whose direction Colonel Loammi Baldwin made the second survey. His report favored the use of Long Pond in Natick, the present Cochituate Lake, estimating the cost of obtaining the supply at \$750,000.⁴ This survey marks the beginning of a discussion of the subject, which continued with but little interruption for twelve years. In 1837 a commission was appointed to make further investigations, two commissioners, Daniel Treadwell and Nathan Hale, urging the adoption of Spot and Mystic Ponds, while the third member of this body, James F. Baldwin, strongly favored the use of Long Pond.⁵ But just at the time when the adoption of the scheme seemed most likely, the panic of 1837 occurred, making it "inexpedient to adopt any measures at the present time for raising funds" for water.⁶ The following year a committee urged the beginning of the work on the ground that the financial embarrassments were temporary evils, and that, moreover, the demand for workmen would furnish "means of alleviating the distresses of those who depend upon labor for support."⁷ The opinion of the committee prevailed, and the council instructed the mayor to apply to the legislature for the necessary powers. No action was taken, however, by the legislature of that year.⁸

The sentiment of the community was against the commencement of the work. It was felt that the size of the debt and the uncertainty as to the city's credit did not warrant such great expenditure at this time.⁹ The election of Mayor Chapman in 1840 was an outcome of the popular demand for retrenchment.

¹ Quincy, *Municipal History*, p. 198.

² *Mayors' Inaugurals*, i, p. 123 (1829).

³ *Ibid.*, p. 202 (1835).

⁴ *City Documents*, no. 12 (1834).

⁵ *Ibid.*, no. 24 (1837).

⁶ *Ibid.*, no. 9 (1837), p. 10.

⁷ *Ibid.*, no. 4 (1838), p. 7.

⁸ *Mayors' Inaugurals*, i, p. 232 (1839).

⁹ *Ibid.*, p. 250 (1840).

But in 1844, with the finances of the city on a better basis, the city council once more turned its attention to the great problem. By this time Long Pond had come to be looked upon as the best source. So, under order of August 26, 1844, commissioners were appointed to devise plans and estimates for the introduction of its water to the city.¹ The commissioners, Nathan Hale, James F. Baldwin and P. T. Jackson, estimated the total cost of the works including distribution at \$2,651,643.² On March 30, 1846, the necessary legislative power was obtained, the special act being accepted by the voters on April 13th of that year. On August 20th the first ground was broken at Long Pond and the name of the lake changed to "Cochituate."³

The act of 1846 placed the direction of the work in the hands of three commissioners appointed by the city council to hold office for three years.⁴ Boston was given power to contract a water loan of three millions. The entire cost of the works, including interest for two years after their completion, could be met by borrowing. The city was also given power to purchase the property of the Jamaica Pond Aqueduct Corporation, which for many years had enjoyed the right of laying its pipes in certain streets. This company, incorporated in 1795 and never a financial success, had repeatedly offered to extend its mains for the purpose of supplying the whole city. In 1850 Boston purchased its entire plant for about \$45,000,⁵ selling in 1856 that part outside of the city to a new corporation.

The construction account was closed April 30, 1851, with a net cost of \$5,184,984.⁶ The city took advantage of the legislative provision and added interest payments on this principal up to April 30, 1853, making the total cost \$5,397,490.⁷ This sum was twice the figure given in the original estimates, though it should be said that the system when completed was on a larger scale than was originally contemplated.⁸ The reservoirs at Brookline, on

¹ *City Documents*, no. 24 (1844).

² *Mayors' Inaugurals*, i, p. 328 (1846).

³ *Auditor's Report* (1851), p. 160.

⁴ *Special Laws*, viii, p. 620 (ch. 167 of 1846).

⁵ *Auditor's Report* (1850), p. 7.

⁶ *Ibid.* (1851), p. 7.

⁷ *Ibid.* (1852), p. 9.

⁸ *City Documents*, no. 50 (1848), p. 39.

Beacon Hill and at South Boston had been quadrupled in capacity and the dimensions of the iron pipes used had been increased beyond the original figures. Moreover, the system had been extended to East Boston at a cost of \$313,000.¹ The fact remains, however, after admitting the advantages to the city of a more adequate plant, that the financial burden imposed upon Boston by the introduction of water was almost twice that expected at the start.

On the 4th of January, 1850, the commissioners, having completed the task of bringing water to Boston and South Boston, turned the care of the department over to the Cochituate Water Board.² This new body consisted of an alderman, a member of the common council and five citizens at large, elected annually by concurrent vote of the city council. The board had power to fix rates, subject to confirmation by the council. From 1853 to 1858 the expenditure of the department was about \$350,000 annually, over \$200,000 of this being interest on the water loan.

Extraordinary expenditures were required within six years after the closing of the construction account, by the enormous waste in the use of city water. In 1852 fifty-eight gallons were being used daily by each inhabitant, double the amount originally estimated as necessary; in 1857, the average consumption had risen to seventy-three gallons.³ Efforts to check this waste proved unavailing. In 1858 the city was forced to raise the dam at the lake two feet, thereby adding 25 per cent to the capacity of the reservoir.⁴ In the following year adequate distribution was obtained by the laying of a new main from Chestnut Hill. This was constructed at a cost of \$305,000, a figure considerably below the original estimate.⁵

County of Suffolk. The demands of the county upon the city treasury became very great in the second period. From \$55,411 in 1844 the expenditures rose with scarcely a break to \$207,478 in 1859. In the period 1854 to 1857 they demanded 6.9 per cent of the municipal expenditures. One cause of this very rapid

¹ *Mayors' Inaugurals*, i, p. 404 (1851).

² *Auditor's Report* (1849), pp. 7, 8.

³ *City Documents*, no. 7 (1853), pp. 9 and 63; *Auditor's Report* (1857), p. 7.

⁴ *Mayors' Inaugurals*, ii, p. 184 (1859).

⁵ *Auditor's Report* (1859), pp. 9, 10.

growth was the increasing number of cases arising in other counties but entered in the Suffolk courts.

The rapid advance in county expenditure the last of the forties was due not only to increased activity in the business of the courts but also to a marked rise in the sums paid for the maintenance of prisoners. Thus the latter item moved upward from \$8,461 in 1848 to \$30,500 in 1854. From this figure it declined somewhat during the remainder of the period.

Complaints of the lack of control over the greater part of the county expenditures were constant. In his report for 1828, page 8, the auditor had said of the County of Suffolk that "it is not easy to perceive the reason that its expenditures should not be brought under the same examination, and subjected to the same revision, as the expenditures accruing in every other department of the City government." The following statement is taken from his report for 1851, page 4: "Of the County Expense the City has no control, except in fixing the Salaries of the officers of the Police court, and the small portion (say \$6000 to \$8000 annually) required to keep the County Buildings in repair." The increase of county expenditure led the city council in 1853 to inquire of the city solicitor how far the city was obliged to pay money for expenditures in relation to which the city council had no control and no voice.¹ His reply stated that Boston was clearly liable for all debts contracted by the various officers of the courts.

Another cause of annoyance to the city council, especially toward the end of the period, was the burden imposed upon Boston of defraying the expenditures of that part of the county lying beyond the limits of the city. In his inaugural of 1856, Mayor Rice told how the exemption of Chelsea from county taxes, formerly a matter of little consequence when the town was small, had come to be a problem of considerable importance. He stated that since 1831, the year in which the contract between Boston and Chelsea was made, the latter "has been twice divided, and now embraces the thriving towns of Chelsea, North Chelsea, and Winthrop, with an aggregate population of some twelve thousand people . . . all looking to Boston for county privileges,

¹ *City Documents*, no. 27 (1853).

and yet no one of these towns pays a dollar toward defraying the county expenses.”¹ In 1830 the population of Chelsea was but one-eightieth of that of the whole county, whereas in 1860 it was nearly one-twelfth. The period closed with the appointment of a joint committee “to confer under the direction of His Honor the Mayor, with the municipal authorities of Chelsea, North Chelsea, and Winthrop, as to the expediency of readjusting the county expenses and obligations.”²

RECEIPTS

Taxes. The importance of taxes was somewhat decreased by the introduction of the income from city water. From 77 per cent of the receipts in the period 1840 to 1843 the amount raised by taxation fell to 69 per cent in the years 1854 to 1857.

In 1845 a remarkable growth in valuation induced the city council to lower the rate from \$6.00 to \$5.70. The tax receipts increased from \$722,038 to \$766,782,³ providing a large surplus. But the tremendous growth of expenditures in 1846 could not be offset by the increase in the amount of assessable property. The tax rate was raised but tardily, being \$6.00 for 1846 and 1847 and \$6.50 for 1848. Taxes brought in \$873,438 in 1846, \$969,519 in 1847 and \$1,066,495 in 1848.

The retrenchment under Mayor Bigelow from 1849 to 1851 was accompanied by an increase in the tax rate from \$6.50 to \$7.00. A business depression, however, prevented a large increase in the tax receipts. Valuation, which had increased 47 per cent in the four years previous to 1847, advanced only 15 per cent in the succeeding four years. The year 1852 saw a decline in the amount of assessable property from \$187,947,000 to \$187,680,000. The tax rate was lowered to \$6.40 in response to a popular demand.

In 1853 and 1854 a very rapid rise took place both in the valuation and in the tax rate. The former advanced from \$187,680,-

¹ *Mayors' Inaugurals*, ii, p. 115 (1856).

² *City Documents*, no. 98 (1860).

³ The figures given in this section include the poll tax receipts as well as the receipts from the general property tax.

000 in 1852 to \$227,013,000 in 1854; the latter was raised from \$6.40 to \$7.60 in 1853 and to \$9.20 in 1854. This extraordinary increase brought in almost two millions in taxes this last year, as against one and a quarter millions two years previous. The rate was raised with the avowed purpose of meeting by taxation a part at least of the cost of all improvements.¹ A further cause of the rise was the reintroduction of the state tax.

Such a strenuous policy could not be adhered to long in the period of expansion beginning in 1854. In 1855 and 1856, the rates were \$7.70 and \$8.00, respectively. The receipts were less than in 1854 despite a continued advance in valuation. To meet the great appropriations of 1857, the rate was raised to \$9.30. The decline in expenditure in 1858 allowed a fall to \$8.60, but in 1859 the rate was advanced to \$9.70.

In his inaugural of 1858, Mayor Rice stated that the complaint of high taxation had become general.² The sudden advance in the tax rate in the fifties after its very gradual movement in the previous decades was sure to arouse the taxpayer. Previous to this time, though we find constant complaints of unequal taxation, we hear very few assertions that the tax burden was too heavy. In 1859, Mayor Lincoln pointed out that Boston did not stand alone in this particular. "If we compare our rate of taxation with other large cities in the Union, or with the thriving cities and large towns in our immediate vicinity," the Mayor said, "it will be found that it is not exorbitant, when we consider the great advantage which a residence in our favored city brings to every citizen."³

The rise from a tax levy of \$722,000 in 1844 to \$2,475,000 in 1859 meant a per capita increase from about \$6.50 to \$14. Meanwhile the amount of assessable property to every inhabitant rose from approximately \$1,070 to \$1,500.

The proportion of taxes uncollected at the end of each year to the total amount assessed averaged 8 or 9 per cent during the forties. Then, after a fall of 2 or 3 per cent the first of the fifties,

¹ *City Documents*, no. 16 (1855).

² *Mayors' Inaugurals*, ii, p. 156 (1858).

³ *Ibid.*, pp. 165, 166 (1859).

from 1854 to 1859 it varied from 11 to 14 per cent, the maximum being in the year 1857, when the tax rate rose from \$8.00 to \$9.30.

The method of assessment remained practically unchanged. In 1850 the importance of the principal assessors was increased by changing their number from three to seven. Of these, four received a regular salary, and were employed the entire year; the other three were paid by the day.¹

It will be remembered that in 1844 the assessors returned to a very strict construction of the abatement law. The practice of hearing no petitions, except where statements had been given in the first place, brought immediate protests. In 1853, the law was changed to allow abatement on condition the taxpayer filed under oath a list of his assessable property. This statement was conclusive as to the various items, but not as to their valuation.²

In his inaugural of 1848 Mayor Quincy referred to the custom of escaping taxation by resorting to the country before the first of May. "Some of our wealthiest citizens," the Mayor said, "from their interest in agriculture or other reasons, found it convenient to leave the city in the month of April."³ That this practice went back to the days of the selectmen a report of a committee in 1821 makes evident. "One ground of complaint," the committee declared, "has been that many rich inhabitants leave town the last of April to take a temporary residence in the Country on the first of May where by an agreement with such places, or otherwise, they pay but a small proportion of the sum they would be liable for if they continued in town and escape all assessments upon their personal property in this town, where they reside the greatest part of the year."⁴ The Mayor's plan for circumventing this evasion was to change the time of assessment. Although this was not done, an attempt was made to accomplish the same end by chapter 301 of 1852. According to this law, every person resident in Boston on January first "shall, on the first day of May following, be taxed in that city, notwithstanding he may have moved therefrom before the first day of May."

¹ *City Ordinances* (1850), p. 398.

² *Acts*, 1853, ch. 319.

³ *Mayors' Inaugurals*, 1, p. 362 (1848).

⁴ Boston Town Records found in *City Document*, no. 128 (1906), p. 229.

The commonwealth levied no state tax from 1846 to 1852. The \$25,000 quota of 1845 required less than 3 per cent of the city's receipts from taxation. In 1853 the state was forced to ask for a tax of \$300,000, the share of Boston amounting to \$98,691.¹ Despite the growth in the city's tax receipts in the interim, this requisition amounted to 6 per cent of the total, adding forty-five cents to the tax rate of the city. A like amount was levied in 1854²; this was raised in 1855 to \$450,000 and in 1857 to \$900,000. In 1857 the amount which Boston paid into the state treasury was \$337,945 or over 15 per cent of the city's total tax receipts. This contribution accounts for \$1.40 of the \$9.30 levied in 1857. In 1858 the state tax returned to a lower figure, being \$360,000 in that year and \$300,000 in 1859. The city's quota of \$98,694 in the last year of the period made up 4 per cent of the amount raised by taxation. Her percentage of the total state tax in the fifties was placed at 32.898.

The poll tax stood at \$1.50, the maximum allowed for city and county purposes, except in 1858, when it was \$2.10. During this period chapter 143 of 1828 was in force, providing that one-sixth of all the taxes, state and local, should be assessed upon polls, but that the poll tax for city, town and county purposes should not exceed \$1.50. When the state tax was levied in 1844, 1845 and again in 1853, Boston and many other towns and cities apparently lost sight of the provision requiring one-sixth of the state tax to be raised upon polls.³ In a test case the supreme court decided in June, 1858, that assessments not so levied were invalid.⁴ This decision accounts for the addition of sixty cents in 1858 to the poll tax of Boston. Sixty cents levied upon 32,621 polls gave \$19,572 or practically one-sixth of the quota of \$118,429 for the year 1858. With this rise to \$2.10 there came a falling off in the number of polls from 33,162 to 32,621. Heads as well as personal property can apparently escape assessment as the rate rises. In 1859 Boston returned to the assessment of \$1.50, the number of polls increasing to 33,456. The assessment of

¹ *Acts*, 1853, ch. 417.

² *Ibid.*, 1854, ch. 396.

³ Bullock, *Finances of Massachusetts*, pp. 55, 56.

⁴ *Governor's Message*, January, 1859, p. 26.

1859 placed less than 2 per cent of the total tax burden upon polls.¹

In this period the state placed no limitation upon the amount which could be raised by taxation for the customary objects of expenditure. It did, however, require legislative authorization in case the town or city wished to raise money for undertakings which custom had not yet legitimized.² The act of 1851, permitting the establishment and maintenance of public libraries, is an example of the extension of the taxing power by legislative provision.³

Rents. Receipts from rents decreased in importance during this period, contributing in the years 1854 to 1857 only 2.7 per cent of the city's receipts. The increase in absolute figures was fairly steady; from \$49,122 in 1845 the amount increased to \$76,357 in 1850 and \$94,060 in 1859.

The rise from \$49,122 in 1845 to \$62,927 in 1846 was due both to an increase in individual rents and to an increase in rentable property. The rents of the market, after remaining practically the same for twenty years, began to rise.⁴ In disposing of the stalls, the city had followed the policy of renting them at reasonable rates to good tenants, rather than of giving them to the highest bidder, as was customary in some cities.⁵ That these rates had come to be below the normal rental value of the stalls was made evident the last of the forties by the premium which a lease commanded.⁶ Consequently, the city council adopted the policy of granting renewals only at higher rates. The sudden jump in the figure for 1850 was due in part to the attempt to gain additional receipts by charging fees for wagon stands near the market. But, as the right of the city to charge for temporary stands was doubtful, the practice was given up after \$14,000 had been collected in a year and a half.⁷

¹ *Auditor's Report* (1859), pp. 26-32.

² *City Ordinances* (1850), p. 15 (note).

³ *Acts*, 1851, ch. 305.

⁴ See Appendix, p. 372.

⁵ *Memorial History*, iii, p. 229 (note).

⁶ *City Documents*, no. 62 (1851), p. 23.

⁷ *Auditor's Report* (1850), pp. 95, 96.

The growing demand for a larger market area led the city council to restore the lower floor of Faneuil Hall to its original use.¹ It was refitted with stalls and opened in 1858; the receipts for the first full year, 1859, were \$19,000, or \$12,000 more than was received previous to the improvement. The extension of the market was in part the result of an attempt to check the rise in the price of provisions. For almost a decade the dealers in Quincy Market had been charged with raising prices by the practice of "forestalling" or monopolizing. A joint committee in 1848 acknowledged that monopoly existed, and urged the city to enforce the laws against forestalling, and to provide better accommodations for those who brought produce from neighboring farms.² In 1854, the council went so far as to refer to a committee the question of selling the market house. In its report, which was against the sale of the property, the committee summed up the argument of the petitioners as follows: "That it is a monopoly, and the City ought not to be connected with, and be a party to, a monopoly,"³ Though the city council held to the idea that higher prices were caused by monopoly, it believed itself better able to control the situation by keeping the market than by disposing of it to private parties.

Interest. The large land sales with which the period began gave rise to a considerable amount of bonds and notes. Consequently, the receipts from interest advanced rapidly. The interest payment on the \$455,014 in bonds and notes held in 1846 was the chief source of the \$35,853 received in interest during that year.⁴ The check to the period of prosperity about 1848 caused a decrease in bonds and notes to \$221,789 in 1850 and an accompanying drop in interest to \$19,948. Renewed activity in land sales carried the amount of bonds and notes to the record point of \$872,674 in 1853. In the years 1854 to 1857 interest receipts constituted 2 per cent of the total receipts of the city. In 1859 the \$73,493 credited to this branch of receipts was made up of \$31,789 for interest on bonds and notes, \$35,724 on cash in banks, \$5,721 on delinquent taxes, and \$258 on delinquent rents.

¹ *City Documents*, no. 23 (1856).

² *Ibid.*, no. 48 (1848).

³ *Ibid.*, no. 128 (1854), p. 5.

⁴ See Appendix, p. 380.

Licenses. In 1846 the receipts from licenses, which had averaged but \$1,604 or 0.2 per cent of the total receipts in the period 1840 to 1843, increased to \$4,202. In the decade of the fifties licenses rose still higher, averaging \$7,965 or 0.3 per cent of the city's receipts in the years 1854 to 1857. The tax on theatricals, together with fees for the licensing of dogs and hackney carriages, and the charge for marriage certificates made up the greater part of the receipts in this period.

A number of other license taxes were enforced at different times during the period. Among these were payments from intelligence offices,¹ pawn brokers² and newsboys.³ In 1856 a committee recommended discriminating against transient theatrical companies because they took money out of the city.⁴

Special Assessments. The very extensive construction of sewers toward the end of the forties caused an advance in the receipts from special assessments. In the years 1854 to 1857 this branch averaged \$23,508 or 1 per cent of the total receipts of the city.

While sewer assessments brought in practically all the receipts, a small amount was obtained from two other sources. In 1845 \$1,741 was received "for assessments on account of the Grading of certain unaccepted Streets," and \$415 for "assessments on account of laying and repairing Sidewalks."⁵ The power to levy sidewalk assessments had long been vested in the city, but had apparently not been used before this year. In 1845 the city secured a special law, giving the mayor and aldermen power to require the grading of streets, which had been thrown open to the public. In case the owners did not perform the work, the aldermen could do it at the expense of the city, assessing the cost upon the abutters.⁶ The amount brought in from this source, after a good-sized collection in the first two years, was very small.

Health. The receipts from the health department increased from \$8,453 in the period 1840 to 1843 to \$26,314 in the years

¹ *City Documents*, no. 30 (1848).

² *Ibid.*, no. 33 (1856).

³ *Auditor's Report* (1856), p. 134.

⁶ *Special Laws*, viii, p. 512 (ch. 236 of 1845).

⁴ *City Documents*, no. 64 (1856).

⁵ *Auditor's Report* (1845), p. 65.

1854 to 1857, constituting in both periods 1 per cent of the city's receipts. In the latter period the receipts of the health department were less than one-fourth of the expenditures. The advance in the decade of the fifties was caused to a considerable extent by credits given the health department for the use of its horses and wagons in other branches of city activity.

Institutions. The receipts from the institutions rose gradually from \$35,591 in 1845 to \$70,227 in 1853, and then declined to \$33,215 in 1859.¹ From 5 per cent of the city's receipts in the years 1840 to 1843 they fell to 2 per cent in the period 1854 to 1857. Down to 1854 the receipts of the department were from one-quarter to one-half of the expenditures.

A large part of these receipts came from payments made by the state for the support of her paupers. Thus, of the sum of \$59,529 received in 1849, \$40,906 was paid by the commonwealth.² This payment was made up of the following credits: \$3,000 to the overseers of the poor, \$22,000 to the house of industry, and \$16,000 to the Boston lunatic hospital. At this time the department saw its greatest prosperity. In 1854, however, the commonwealth began the policy of caring for its own paupers. Boston had built a very large plant on Deer Island with the expectation of housing even larger numbers of the state's poor. The removal of these boarders left her structure almost empty. The lunatic hospital continued to receive state charges until November 30, 1858, when they too were removed to new quarters.³ The loss of receipts on account of the removal of the state paupers is measured by the fall from \$70,227 in 1853 to \$33,215 in 1859. In 1859 only one-eighth of the expenditure could be met from the receipts.

School Fund. The transfer to the school fund in 1854 of the state's holdings in Western Railroad stock increased the principal to \$1,500,000. The income from this fund accordingly rose from \$49,078 in 1853 to \$85,695 in 1854.⁴ The entire income down to the year of the transfer had been apportioned among the towns on

¹ See Appendix, p. 373.

² *Auditor's Report* (1849), pp. 74-76.

³ *Ibid.* (1858), p. 143.

⁴ *Massachusetts Auditor's Report* (1856), p. 38.

the basis of the school census, the towns being required to raise a certain amount for the education of each child.¹ By the act of 1854 only one-half of the interest was to be apportioned among the towns and cities; the other half was to meet certain specified educational charges.² The amount which Boston received was very small, compared with her contribution to school expenditure. It rose gradually from \$3,055 in 1845 to \$6,045 in 1859, constituting in the years 1854 to 1857 two-tenths of 1 per cent of the annual receipts of the city. At this time Boston obtained about one-fifteenth of the total amount apportioned among the towns.

Water. The introduction of the water rates contributed 10 per cent to the total receipts of the city. The act of March 30, 1846, which authorized the construction of the water system, laid down explicit directions as to the conduct of the plant. It was with the expectation that the water department would be on a paying basis two years after the completion of the system that the legislature gave the city the privilege of adding to the principal the interest payments made during that time. The act gave the city council power to "regulate the price or rents for the use of the water, with a view to the payment, from the net income, rents, and receipts therefor, not only of the semi-annual interest but ultimately of the principal also of the "Boston Water Scrip," so far as the same may be practicable and reasonable."³ The net surplus was to be put in a sinking fund to be managed by the mayor, treasurer, and auditor, and to be applied to the payment of the water scrip. The act also provided the mechanism by which an increase of rates could be brought about in case they were not sufficient to pay the interest charges. The petition of one hundred or more legal voters to the supreme judicial court would obtain the appointment of three commissioners. Their award, if accepted by the court, was to bind the city council for three years.

The receipts from the water rates began January 1, 1849, although the system was not completed until April 30, 1851. The first year there were 8,010 water takers, and the water works

¹ *Acts*, 1841, ch. 17. ² *Ibid.*, 1854, ch. 300. ³ *Special Laws*, viii, p. 624.

yielded \$153,000. An increase in the rates in 1850 contributed to the growth of the receipts to \$199,426 in 1851.¹ In 1853, when the enterprise was supposed to be on a paying basis, there were 17,229 water takers, and the receipts for the year were \$213,677. The expenditure for 1853, however, was \$344,718, being \$131,040 in excess of the receipts. The rise in the receipts for 1854 to \$263,158 with the increase in water takers to 18,428, expenditure remaining constant, reduced the deficit to \$81,317. In his inaugural of 1853, the mayor explained that a deficit of \$120,000 was sufficiently offset by the value of the water used in its public buildings, fire hydrants and fountains.² That this was not the general view, however, was shown by the deliberations of the city council as to the best method of increasing the receipts. The water tariff, apparently the result of adjustment between the water board and the joint standing committee, confirmed by ordinance of the city council, prescribed certain annual rates, based in the case of dwelling houses on the valuation of the property and the number of the families. The great waste in the use of water, noted by the chief engineer in his report to the board as early as January, 1852,³ induced the city council to authorize the board to employ meters whenever they deemed it advisable.⁴ When, in 1859, the board put in a number of meters, especially where large quantities of water were used, the results were very satisfactory.⁵

Some increase in receipts was obtained by an advance of one dollar the first of January, 1855, in the rates upon dwelling houses. The receipts for the year rose to \$291,859, leaving a deficit of only \$37,460. Further improvement was checked by the increase in annual expenditure, the deficit in 1857 being \$66,585. In 1858, the deficit was \$40,129, inducing the city council to adopt the suggestion of the water board that the charges be raised on water used for other than domestic purposes.⁶

¹ *City Documents*, no. 220 (1894), p. 150.

² *Mayors' Inaugurals*, ii, p. 16 (1853).

³ *Auditor's Report* (1851), p. 7.

⁴ *City Ordinance* (December 23, 1852).

⁵ *Mayors' Inaugurals*, ii, p. 206 (1860).

⁶ *City Documents*, no. 56 (1859), p. 6.

Seven years after the completion of the work Boston was unable to meet from the water rates the ordinary charge of her system. This was due in part to the great cost of the works and in part to the reluctance of the city council to raise the rates.¹ Much of the waste in the use of water could have been prevented by the complete adoption of the meter system. The rates should have provided not only for the ordinary charges but also for the gradual repayment of the water debt.

Sales of Property. The great prosperity which began in 1843 increased very much the sales of city land. In 1845, 662,867 feet of land were sold, bringing in the large sum of \$401,667. Almost as large sales were made in the succeeding year. Then, the boom declined as quickly as it had risen, the sales for 1847 amounting to only \$15,081.

About 1844, it will be remembered, the city council adopted the wise policy of preparing the lands for sale, systematically, and on a large scale, thereby making the purchaser pay in the enhanced price of the land for improvements which the city had formerly been obliged to make after the sale at its own expense. Mayor Quincy, in his inaugural of 1847, commended the new policy. He saw nothing to prevent the eventual payment of the city debt with the money received from the sale of city property.² Josiah Quincy, Jr., was the last of the mayors who placed great faith in the amortisation of the debt by this means. The almost complete cessation of land sales in the very year of his address seems to have put an end to such expectations.

This inaugural contained suggestions that were destined to shape the land policy of the city. Mayor Quincy advocated the sale of lands "at reasonable prices, to all who desire to build," thus adding to the assessable property of the city.³ The sale of land for the purpose of building up the city gradually came to take the place of the older motive of sale for the sake of revenue. The very small receipts from the sales of land in 1847 and 1848 caused Mayor Bigelow in his first inaugural to advise a reduction in the price of land, thereby "inducing citizens to settle within

¹ *City Documents*, no. 25 (1854).

³ *Ibid.*, p. 340 (1847).

² *Mayors' Inaugurals*, i, p. 339 (1847).

the limits of Boston, and add to the taxable property.”¹ In 1852 a committee reported in favor of stimulating the demand for city lands by offering them on more liberal terms to purchasers.²

The report states that “while our foreign population is rapidly augmenting, our native population is in a greater ratio diminishing. . . . Many streets formerly occupied by some of our wealthiest and most respectable citizens, are now wholly surrendered to foreigners. The older parts of the city are crowded, rents are exorbitant, and it is with extreme difficulty that a comfortable tenement can be obtained. Many citizens of Boston are erecting houses in the neighboring cities and villages, and increasing the taxable property in these places from the profits of business transacted within our limits.”³ The very high rent which residents of the city were forced to pay was, in the opinion of the committee, a matter of vital concern for Boston.

That soon after 1840 the city was losing many good citizens, there can be no doubt. Suburban life was being made possible by the development of cheap and convenient means of communication. As early as 1850 omnibuses and special trains ran almost hourly, commuting for passage at from twenty to forty dollars a year. In the forties Roxbury grew in population from 8,310 to 18,316, and in the amount of assessable property from \$3,000,000 to \$13,000,000; Cambridge increased in population from 8,127 to 14,825; Chelsea, from 2,182 to 6,151; and Dorchester, from 4,458 to 7,578. It was estimated at this time that more than three thousand persons, whose places of business were in Boston, resided in surrounding towns.⁴ Though more liberal terms on land sales might have checked somewhat this exodus, it does not seem likely that they could have exerted a very great influence.

The falling off in the receipts from the sales of property from 1847 to 1851 was largely due to a local depression. By 1852 the revival of trade and the adoption of somewhat more liberal terms brought larger land sales. In his inaugural of 1853 Mayor Seaver stated his belief that further efficiency could be gained by the appointment of a board of land commissioners, similar in

¹ *Mayors' Inaugurals*, i, p. 372 (1849).

³ *Ibid.*, p. 3.

² *City Documents*, no. 11 (1852).

⁴ *Ibid.*

composition to the water board.¹ Management by a board, which the Mayor believed gave greater permanency, met the approval of the city council and was, accordingly, adopted by ordinance in the same year.

Though the amount of land sold increased, the sales did not satisfy the council, and in 1854 a committee recommended that the new board of commissioners sell to builders at still lower prices without any cash payment and on long credit.² In his inaugural of 1854 Mayor Smith states that "it has been fearlessly asserted by gentlemen whose opinions are entitled to marked respect, that the prices at which the City has held the public lands, have uniformly ranged above their true marketable value."³ In 1855 the Mayor's condemnation of the old fiscal policy is again seen in the following quotation from his second inaugural: "Gentlemen of sound judgment, long since advanced an opinion that, had the unimproved lands on the Neck been given away twenty years ago, to persons pledged to build, the City would have gained incalculably by the scheme."⁴ The recommendation of the city council was not adopted by the commissioners. As a result, they were replaced in 1855 by the old committee.⁵

The policy of selling land at auction regardless of price was now adopted, and undoubtedly led to a rapid increase in the sales.⁶ In 1855, \$153,502 was obtained. The requirement that purchasers should build within a short time was responsible for the erection of three hundred and fifty buildings within the year.⁷ In 1858, \$215,530, and in 1859, \$125,326 was contributed by the sale of public lands. In the period 1854 to 1857 sales of public property amounted to 6.5 per cent of the total receipts of the city.

The experience of Boston points to the wisdom of selling public lands with a view to encouraging settlement rather than as a

¹ *Mayors' Inaugurals*, ii, p. 20 (1853).

² *City Documents*, no. 29 (1854).

³ *Mayors' Inaugurals*, ii, p. 56 (1854).

⁴ *Ibid.*, p. 73 (1855).

⁵ *Auditor's Report* (1854), p. 6.

⁶ *Ibid.* (1856), p. 5.

⁷ *Mayors' Inaugurals*, ii, p. 105 (1856).

fiscal expedient. By 1847 the latter view had lost much of its old importance, and by 1856 the council was thoroughly converted to the policy of sale for settlement. It is probable that the earlier adoption of better terms to builders would have somewhat checked the movement into the suburbs, and given Boston more assessable property.

Alien Passenger Tax. Increasing immigration brought the receipts from the alien passenger tax to \$11,526 in 1845 and \$55,002 in 1847. In 1848 the amount of the tax declined to \$10,370.

After 1840 the city, much against its will, was obliged to pay these receipts into the state treasury. In 1845 Alderman Parker could see "no good reason why the tax on alien passengers should be paid into the State Treasury."¹ The auditor's report for 1847, pages 3, 4, speaks of withholding the \$55,000 received in that year as part payment for the erection of a suitable hospital for "foreign diseased paupers" on Deer Island. This sum was given up the following year when called for by the state treasurer. In 1849 the constitutionality of the alien passenger law was denied by the Supreme Court.² As a result, the law was revised in 1850, the state taking over the task of collecting the head tax.³

County of Suffolk. The receipts of the county rose very rapidly from \$24,663 in 1844 to \$49,334 in 1852, \$92,858 in 1854 and \$125,947 in 1855. The remarkable advance after 1852 was principally due to the large number of prosecutions under the prohibitory liquor law of that year.

In 1855 the contribution of the state to Suffolk County toward the cost of criminal prosecutions amounted to \$78,187, being over one-third of the total payment made by the commonwealth for this purpose. In his report for 1856 the state auditor complains of the heavy burden entailed by this system, which did not allow an audit either by the state authorities or by the county treasurer. He states that "the District Attorneys have the key to the State Treasury almost under their control, which may be used

¹ *Mayors' Inaugurals*, i, p. 311 (1845).

² *Memorial History*, iii, p. 246.

³ *Acts*, 1850, ch. 105.

judiciously or not.”¹ The county receipts in the years 1854 to 1857 amounted to 4 per cent of the entire receipts of Boston. Their fluctuating character made them a matter of no little concern to those who prepared the city budget.

In 1855 a superior court for Suffolk County was established in place of the old court of common pleas.² The state auditor at first interpreted the act of 1855 as depriving Boston of her customary claim to the repayment of two-thirds the cost of criminal prosecutions. He accordingly refused to allow the city \$42,000.³ The city retaliated by keeping back an equal amount of the state tax for 1856. This explains, in part, the fall in county receipts from \$125,947 in 1855 to \$47,045 in 1856, and their rise the following year to \$192,508, when the auditor reversed his earlier decision. Further uncertainty was caused in 1859 by an act, merging the municipal and superior courts, which provided that after July 1, 1859, all fines and costs should be paid into the state treasury.⁴ In 1860 chapter 191 cut off the right to the repayment of balances, but allowed the county to retain the money received from costs and fines.⁵

The proportion of the county's expenditure met by its own receipts varied greatly. The great advance in receipts in the years 1854 to 1857 made possible the payment of as much as 60 per cent of county expenditure from county receipts.

DEBT

The increase in valuation from \$118,450,000 in 1844 to \$135,948,000 in 1845 brought in very large receipts, although the tax rate was reduced from \$6.00 to \$5.70. This, together with receipts from sales of city property, amounting to \$192,138, permitted a continuance of the policy of debt reduction, begun in the last years of the first period. The net debt of the city was accordingly diminished by \$348,000 in 1845.

¹ *Massachusetts Auditor's Report* (1856), p. 65.

² *Mayors' Inaugurals*, ii, p. 116 (1856).

³ *Massachusetts Auditor's Report* (1856), p. 65.

⁴ *Acts*, 1859, ch. 196.

⁵ *City Documents*, no. 98 (1860), p. 9.

On April 30, 1846, the debt amounted to only \$436,000, the lowest point since 1826. The interest payment in 1845 was \$59,118, an addition of less than 6 per cent to the other expenditures of the city. The feeling prevailed that the enormous land sales made the practical extinction of the debt a matter of only a few years. This knowledge of the favorable condition of the city's finances probably gave an impetus to the movement of expansion just then beginning. In his inaugural of 1846, Josiah Quincy, Jr., who was very eager to secure the introduction of water, pointed out that the city debt could be met by the balance in the "sinking fund" together with the proceeds of the sale of bonds and notes and of the city wharf.¹ The wharf, which he estimated at \$600,000, eventually sold in 1853 for \$400,000. Against the commissioners' estimate of \$2,651,643 as the cost of the water system, he placed the city lands valued at \$3,175,000. That the finances of the city presented a favorable showing, there can be no doubt, but Mayor Quincy, like many others, placed too much confidence in sales of city property.²

The water debt and the city debt proper were kept in separate accounts, a practice of little avail after 1852 because of frequent transfers. The introduction of city water at a cost of \$5,397,490 helped to carry the debt of Boston from \$436,000 in 1846 to \$6,986,000 in 1853. But this enormous undertaking was not the only cause of increased expenditure. Large advances were made in almost all branches of city activity, especially in the years 1846 to 1848. Much of this increase was met by loans. Consequently, the city debt proper was increased by over \$1,100,000 in the same period.³

The story of the water loan, negotiated at a period when the value of American securities had been impaired by repudiation, is noteworthy. The act, authorizing the construction of the water works, limited the power of the city to borrow for this object to

¹ *Mayors' Inaugurals*, i, p. 327 (1846).

² *Ibid.*, p. 328 (1846).

³ In the process of funding the water loan in 1852 loans, \$500,000 or \$600,000 in excess of the cost of the water works, were negotiated. This balance swelled the city "sinking fund," thus making the city debt proper apparently smaller by that amount. See Table on p. 380 of the Appendix.

three million dollars. This limit was extended, however, as the cost came to exceed the original estimate. The committee of finance believed that the excellent security of the investment would permit placing the loan abroad at a rate of interest lower than could be obtained in this country. They, accordingly, commissioned William Rollins, Esq., who had business connections with European banking houses, to conclude a loan at 4 per cent.¹ Mr. Rollins spent the summer of 1846 in Europe, and negotiated with the leading banking firms of Amsterdam, Paris and London. He was unable, however, to secure terms more favorable than could be obtained here. The bankers told him there was no market for American stocks.

The stringency in the American money market, due to apprehension of the result of the independent treasury system and of the changes in the tariff, deferred the attempt to procure a loan at home until the spring of 1847. Meanwhile the committee of finance obtained through temporary loans the funds needed for immediate construction. On the 30th of April the committee began advertising for sealed proposals for a loan of one million dollars at 5 per cent, subscriptions to close on July 8th. Notices were widely circulated both in the United States and in Europe. In order to reach the small investor, consideration was to be given to bids of \$500 or upwards.² The loan was successful. A total of \$995,000 was taken at prices but little below par.³ After 1857 the principal was to be repaid in five equal annual instalments. The committee made the time of repayment coincide with the period in which they expected the Neck lands would be sold. This permanent loan and \$1,134,056 borrowed temporarily constituted the total water debt at the end of 1847.

From 1848 onward, the city was able to obtain long-time water loans at better rates of interest. As fast as its temporary obligations fell due, it funded them in water scrip. In 1852 it secured in London the residue needed for the water works, a £400,000 loan at 4½ per cent, payable in 20 years. The remarkable credit,

¹ *Mayors' Inaugurals*, i, p. 338 (1847).

² *Ibid.*, i, p. 360 (1848).

³ *City Documents*, no. 30 (1847), p. 5.

which Boston enjoyed at this time, permitted the placing of this loan at $10\frac{1}{2}$ per cent premium.¹ The average rate of interest paid on the total water loan in 1853, just after the funding of the greater part of the temporary debt, was 5.042, as against 5.421 per cent paid in the previous year. The commencement in 1857 of payment on the first loan brought the interest rate down to 4.75 per cent in 1860. At this time the total water debt stood at \$3,846,000, only \$7,500 of this being a temporary loan. Its highest point was \$5,972,976, reached in 1853 during the process of funding. This reduction could not be made, of course, out of the water rates. Moreover, the money did not come to any great extent from taxes. It was obtained from new loans, incorporated in the city debt proper. In his report for 1858 the auditor remarked that these apparent reductions were "merely transfers from the Water Debt to the City Debt."² This policy was likely to make future administrations forget the object for which the loans had originally been contracted.

During the rapid increase in expenditures which followed 1845 resort was had to loans as freely as in the thirties. Mayor Quincy added about \$700,000 to the city debt proper, and Mayor Bigelow, despite his great opposition to the liberal policy then in vogue, was obliged to see the debt increase about \$250,000. The advance under Mayor Bigelow was amply justified, since during his term much was spent in such permanent improvements as the new jail and the almshouse on Deer Island. But for these extraordinary undertakings, the Mayor's policy of retrenchment would have resulted in a reduction of the city debt proper. His condemnation of expenditure is well expressed in his address of 1850. "I have reason to believe," Mayor Bigelow said, "that there is no other City in the world, (certainly not in our country) the affairs of which, in proportion to its size, are administered at so great an expense as our own."³

Mayor Seaver, who succeeded Mr. Bigelow in 1852, was also in favor of retrenchment.⁴ He made the mistake the first year, however, of allowing the tax rate to be lowered from \$7.00 to

¹ *Mayors' Inaugurals*, ii, p. 16 (1853).

² *Auditor's Report* (1858), p. 6.

³ *Mayors' Inaugurals*, i, p. 393.

⁴ *Ibid.*, ii, p. 12 (1852).

\$6.40. As a result, his retrenchment in expenditure was accompanied by a considerable increase in the consolidated debt. This led in 1853 to a tax rate of \$7.60. The increased receipts from taxation and also from the sale of city property enabled Mayor Seaver to reduce the debt by \$599,000. This new policy of meeting expenditures from taxation carried the tax rate to \$9.20 in 1854, the first year of Mayor Smith's administration, making possible a reduction of \$279,000 in the consolidated debt. In this year the task of repaying the water scrip as it fell due was entrusted to the committee on the reduction of the city debt.¹ The second year of Mayor Smith's administration saw the payment of \$90,000 more on the debt. The reduction from \$6,986,000 in 1853 to \$6,018,000 in 1856, a diminution of \$868,000 in three years, appears very commendable when we consider that these were years of rapidly increasing expenditure. This was the first time that debt reduction accompanied increasing expenditures. A large part of this payment was made, however, from the sales of city property.

In his inaugural of 1857, Mayor Rice recommended the passage of an ordinance which would extend to the consolidated debt the provision requiring that an amount equal to 3 per cent of the debt be appropriated annually from taxes.² Although such an ordinance was not passed, the city council did increase the appropriation for that year to \$80,000, an advance of \$20,000. This was raised in 1858 to \$105,000, and in 1859 to \$220,000, this payment being equivalent to 2 $\frac{2}{3}$ per cent of the consolidated gross debt. Mayor Rice attributed the steady increase in the debt to "the necessity of annually undertaking enterprises which are not anticipated at the time when the annual appropriation bill is passed, . . . and also of providing for those permanent works which appear to be proper subjects for loans rather than for immediate taxation."³ He suggested that provision be made "for the payment of all extraordinary works by instalments to be raised at intervals by taxation within specified periods from the time they are undertaken."⁴

¹ *Auditor's Report* (1854), p. 165.

³ *Ibid.*, p. 125.

² *Mayors' Inaugurals*, ii, p. 126 (1857).

⁴ *Ibid.*, p. 126 (1857).

From \$6,018,000 in 1856 the debt rose to \$7,524,000 in 1860. All of these years saw an increase with the exception of the last when the record tax rate of \$9.70 allowed a reduction of \$100,000. And yet during the last four years of the period the city was fast disposing of its property, the receipts from this source amounting to practically \$1,000,000 or \$250,000 a year.

Contemporary opinions differ as to the burden of this debt of \$7,524,000 at the end of the period. In 1858 Mayor Rice presented a very optimistic statement of the city's financial condition, claiming that there was not even cause for "the apprehensions of the most timid."¹ Just one year later we find Mayor Lincoln declaring that "there is a just apprehension in the minds of the citizens as to the public debt, which is accumulating from year to year." "Our current expenses each year," he said, "should be met by those who are enjoying the good they secure."² That the city's credit was excellent at the end of the period, there can be no doubt; but, that the debt should have been much smaller, is also true.

Our study of the debt of Boston to 1860 has brought out the fact that very little reliance should be placed on sales of property as a means of reducing the debt. These are likely to be least when city activity ceases, the very period in which debt reduction should take place; in times of prosperity their volume encourages expenditure. Furthermore, the need of careful distinction between ordinary and extraordinary expenditure is apparent. The maintenance of the identity of each debt, instead of the custom of incorporating it when due in a redemption loan, would at least have given the citizens a better statement of the financial condition of the municipality. This and the provision, as far as practicable, in every loan for annual repayment from taxes might have checked somewhat the resort to the use of the city's credit and made less uncertain debt reduction. Of course, the success of this device, as well as that of any that could be devised, depends upon the coöperation of the city government. Its merit is that it presents clearly the actual condition of the city's finances.

¹ *Mayors' Inaugurals*, ii, p. 157 (1858).

² *Ibid.*, p. 165 (1859).

FINANCIAL POLICY

The first period closed with the finances of the city on an excellent basis. The policy, followed by Mayors Chapman and Brimmer, of reducing expenditures and at the same time maintaining the tax rate had given excellent results. Four years of economy had resulted in the reduction of the city debt by one-half.

The second period opened with Thomas Aspinwall Davis as mayor. He was the candidate of the "Native American" party which for two decades found support from many who feared the destruction of American institutions by immigration. Mayor Davis died in office toward the end of his year.¹ Although expenditures were fast increasing in response to prosperity it was found possible to reduce the debt by \$348,000 in 1845, bringing it to only \$436,000. This amortisation was accomplished from the proceeds of the public land sales which amounted to \$400,000 in that year. Inasmuch as the city council had reduced the tax rate from \$6.00 in 1844 to \$5.70 in 1845, we cannot give to the policy of the new administration the commendation won by the government under Mayors Chapman and Brimmer. The chief causes of the increase in expenditures for 1845 were reorganizations in the police and fire departments and much greater activity in street laying-out and widening.

The upward movement with which the period began reached its high point under Mayor Josiah Quincy, Jr., a son of the second mayor. He served three years, years of tremendous growth in municipal activity, in which expenditures, exclusive of the large amount spent in the introduction of city water, almost doubled. Apparently, Mayor Quincy inherited much of his father's energy and ability, and knew, as did his father, how to take advantage of prosperous times in carrying out municipal improvements. Like him, he possessed an optimistic nature, and was able to persuade his fellow citizens that in the accomplishment of these tasks the resources of the city amply justified a very large increase in the debt.

¹ *Memorial History*, iii, pp. 250, 251.

The great event of Mayor Quincy's administration was the construction of the water system. This work, not entirely completed until 1851, cost over \$5,000,000, almost twice as much as was originally expected. Although the system was much larger than the estimates called for, this increase in the scale of the undertaking was necessary because the needs of the city had not been accurately calculated. Large sums were also spent during the Mayor's three years on the streets, in the preparation of public lands for sale, in the erection of many new schoolhouses and in 1848 in meeting the initial cost of the new jail.

The result of these three years of activity is seen in the rise of expenditures from \$974,102 in 1845 to \$3,378,944 in 1848 or, exclusive of the expenditure for city water in that year, to \$1,624,069. Meanwhile the debt had risen from \$436,000 to \$4,946,000, an increase of \$4,510,000. Of this increase, \$723,000 was caused by loans incurred for other objects than water. The receipts of the city during this same period advanced from \$1,126,433 to \$1,412,537, this growth being accounted for by the increase in tax receipts. As in former times of rapidly growing expenditures, the city council was very slow in raising the tax rate. This was fixed at \$6.00 in 1846 and 1847 and \$6.50 in 1848. Obviously, the placing of the rate at so low a figure, when loans were necessary to cover the deficits, meant a reversal of the policy so lately pursued of meeting expenditures from taxes. Though a small amount of increase in the debt would have been warranted by the extraordinary character of some of the expenditures, the \$723,000 contracted for city objects exclusive of water seems too great an addition. The payment of practically all expenditures out of taxes might have caused a saving of public money, for extravagance in the construction of public buildings probably began at this time.

The next few years, of comparative depression, had a mayor well suited to the task of retrenchment, John Prescott Bigelow. He served three years, his administration seeing the completion of the water works, the construction of the new jail on lines more modest than those at first planned, and the erection of the almshouse on Deer Island. These undertakings did not permit

retrenchment to the extent Mayor Bigelow desired. Moreover, the community was demanding a higher grade of service. Although the repeated demands of the Mayor for a higher tax rate were partially successful, he was obliged to see an increase in the city debt proper of \$253,000. At the end of his administration the consolidated debt of the city was \$6,621,000. The tax rate was \$6.50 in 1849, \$6.80 in 1850 and \$7.00 in 1851.

The work of retrenchment begun by Mayor Bigelow was continued by his successor Benjamin Seaver who held office in 1852 and 1853. He succeeded in keeping the expenditures of the city at practically the same level. The tax rate, after being lowered the first year of the administration to \$6.40, was raised in the second to \$7.60, the increase manifesting the purpose of the city council to meet all expenditures from taxes. The greater receipts from taxation in 1853 together with large returns from the sale of city property made possible during his administration a debt reduction of \$234,000.

The commercial prosperity which began about 1853 soon affected municipal activities. Expenditures rose from \$2,241,135 in 1853 to \$2,452,220 in 1854 and \$3,739,554 in 1857.¹ In the years 1854 and 1855 Jerome Van Crowninshield Smith was mayor. The chief events of his administration were the reorganization of the police department and the enactment of the new city charter. The first year he was in office the city council held to the excellent policy established by the government of 1853, raising the tax rate to \$9.20. As a result, the city was able to meet the increase in expenditures without recourse to loans and also to pay off \$279,000 on the debt. Unfortunately, the city council was unable to maintain such a vigorous policy long. The growing number of complaints against high taxes forced the city government to lower the rate for 1855 to \$7.70. Even at this figure the large land sales allowed a payment of \$90,000 toward the debt. This policy of the governments of 1853 and 1854 is to be greatly commended, especially that of the latter, which in the face of increasing expenditures dared to attempt the reduction of the city debt.

¹ The resumption of the state tax levy in 1853 was in part responsible for this increase.

Alexander Hamilton Rice was mayor in 1856 and 1857. An increase of expenditure was taking place in practically all lines of municipal activity, particularly in the laying out of streets and the improvement of public lands. Meanwhile receipts lagged considerably behind expenditures in spite of a tax rate of \$8.00 in 1856 and \$9.30 in 1857. Consequently, the city debt rose to \$186,000 in the former year and \$789,000 in the latter. The large receipts from the sale of city property served only to check somewhat the increase in the debt.

The last two years of the period were years of rest. During these years the city was admirably served by Frederick Walker Lincoln who was to hold office again during the troublous years of the War. The panic of 1857 is recorded in the decrease in the amount of taxable property from \$258,111,000 to \$254,714,000. Consequently, with a tax rate reduced to \$8.60 the government was unable to meet the requirements of a higher plane of municipal economy without resort to loans. The debt increased \$630,000 in 1858, carrying it to \$7,623,000, the highest point of the period. The next year, however, a tax rate of \$9.70, the record figure before the War, enabled a reduction of \$99,000.

The second period saw a change much greater than that accomplished from 1822 to 1844. In the first period expenditures rose from about \$200,000 to \$750,000; by 1859, however, they had increased to \$3,500,000. The police and fire departments had become better adapted to the needs of a large city; the extraordinary expenditures of the first period, such as the erection of schoolhouses, had become normal. The standard of service had increased considerably, and new conveniences, particularly that of city water, had been introduced. The money for all these improvements came, as we have seen, from the proceeds of a much higher tax rate and also from loans. The tax rate had increased from \$5.70 in 1845 to \$9.70 in 1859, and the debt of \$7,524,000 had practically all been contracted during the second period. Even after allowing for the extraordinary expenditure for city water, we must conclude that the debt in 1859 was too large. Throughout the greater part of the period, especially in the years 1845 to 1852 a higher tax rate should have been employed.

The second period left Boston with many tasks before her. The accomplishment of these was to take her still farther away from the conservatism of the town government, to increase greatly the variety of her expenditures, to raise still higher the rate of taxation, and to fasten more firmly upon the city a permanent debt.

CHAPTER IV

THE PRESERVATION OF THE UNION: THE GREAT LAND AND STREET IMPROVEMENTS: THE ANNEXATIONS, 1860-1873

GOVERNMENT

THE form of government established by the charter of 1854 continued with but few changes throughout this period. It will be remembered that the act of 1854 increased the executive powers of the aldermen and confirmed the practice of administration through joint committees. By placing the mayor outside the upper branch of the city council, it diminished his power as an executive officer. The qualified power of veto, which extended to all acts of the city council in concurrent vote, and to the orders of either branch when an expenditure of money was involved,¹ did not make up for the authority which the mayor formerly exercised as a member of the board of mayor and aldermen. In 1864 the city council secured permission to elect the overseers of the poor.²

With the growth of the city it became more and more apparent that the board of aldermen and the committees were not qualified to deal adequately with executive business. The defects of the system were the lack of responsibility and the difficulty of getting efficient service from an unpaid board. Moreover, the composition of the board was changed annually. In 1864 the city council asked the legislature to lengthen the terms of the mayor, aldermen and members of the common council.³ Four years later a committee favored extending the terms of these officers to two years.⁴

Toward the end of the period a movement was gathering force, which aimed to take away the executive power of the aldermen.

¹ *Acts*, 1854, ch. 448, sec. 47.

² *City Documents*, no. 120 (1884), p. viii.

³ *Mayors' Inaugurals*, ii, p. 353 (1865).

⁴ *City Documents*, no. 14 (1868).

The growth of this movement was accelerated by the very apparent inability of the upper branch to meet certain emergencies. The majority of these reformers were unwilling, however, to transfer executive power to the mayor, fearing to place so much authority in the hands of one man. Their plan was a sort of compromise, contemplating the establishment of paid commissioners.¹ The first result of this agitation was the vesting of the power to lay out, widen, alter and discontinue streets and to abate taxes in a board of street commissioners. This body was to consist of three men, one to be elected annually by the voters.²

The power of the aldermen was still further reduced by the reorganization of the health and fire departments. By ordinances of December 2, 1872 and January 10, 1873 the control of the health of the city was transferred to a board of health, consisting of three persons, not members of the city council, to be nominated by the mayor and approved by the council. They were to hold office for three years.³ In the same year a board of fire commissioners was created by ordinance, their method of appointment and term of service being the same as that of the board of health.⁴

In his inaugural of 1874 Mayor Cobb demanded a revision that should leave the city council only its legislative business.⁵ The inaugurals of 1865⁶ and 1873⁷ had contained similar requests. Mayor Cobb's recommendation led to the appointment of a commission on charter revision.⁸ The first part of the period saw government by committee at its height; the last saw it begin to decline. After enjoying for fifty years the exercise of practically all executive power, the aldermen were slowly but surely being forced to give up their cherished privileges.

EXPENDITURES

The period 1860 to 1873 saw a most remarkable rise in expenditures. In these fourteen years the expenditures of Boston in-

¹ Ernst, *Constitutional History*, p. 117.

² *Acts*, 1870, ch. 337.

³ *Auditor's Report* (1872), p. 20.

⁴ *Ibid.* (1873), p. 14.

⁵ *Mayor's Inaugural* (1874), p. 7.

⁶ *Mayors' Inaugurals*, ii, p. 353 (1865).

⁷ *Mayor's Inaugural*, (1873), p. 30.

⁸ *Memorial History*, iii, p. 282.

creased from \$3,500,546 to \$17,812,874. The per capita figure advanced from about \$20 to \$65.¹

The retrenchment with which the last period closed continued through 1861, the expenditures being \$3,343,776 in that year. In 1862, however, the great demands of the War carried them to \$4,625,135. But city expenditures, exclusive of War payments, remained at about \$3,300,000 through 1863. Then, largely in response to higher prices, they rose to \$4,700,000 in 1865.

Peace left the city free to take up new tasks. A period of great activity at once began, carrying expenditures from \$4,797,320 in 1865 to \$11,962,251 in 1869. Then, after a rest in 1870 and 1871 they rose to \$14,188,440 in 1872 and \$17,812,874 in 1873. The growth of expenditures after 1865 was somewhat accelerated by the annexation of Roxbury in 1868, which added possibly \$700,000, and of Dorchester in 1870, which increased expenditures \$200,000.² The annexation of Brighton, Charlestown, and West Roxbury took place at the very end of the period, affecting but little the expenditures of 1873. But the greater part of this increase was the result of extraordinary municipal activity. The shattering of conservative ideas under the influence of a stirring conflict led alike to great public and private undertakings.

General Government. The expenditure for general government did not keep pace with the growth in total expenditures. It rose from \$121,975 in 1860 to \$357,373 in 1873. In the period 1868 to 1871 this branch constituted but 2.8 per cent of all city expenditures, as against 3.5 per cent in the years 1854 to 1857. Meanwhile the per capita figure had risen from \$0.59 to \$1.17.

I have divided the total expenditure for general government into salaries and other expenditures.³ Salaries increased suddenly from \$92,127 in 1863 to \$106,965 in 1864 and \$114,350 in 1865. This rise was due to the necessity of keeping pace with the higher level of prices. The increased cost of labor and supplies affected

¹ I have estimated the population in 1873 at 275,000, leaving out the annexations of 1873, which came too late in the year to have much effect upon expenditures.

² *Memorial History*, iii, p. 600.

³ See Appendix, p. 352.

all branches of city activity.¹ The fall to \$91,396 in 1866 was the result of transferring to other departments the compensation of certain officers formerly charged under the head of salaries. From this figure the expenditure steadily rose to \$167,440 in 1873. The marked increase in 1870 was largely due to the necessity of employing a greater force in the assessors' department.

The following table gives the pay of the city's principal officers for every year in which a change took place.

	1860	1864	1865	1866
Mayor	\$4,000	\$5,000	\$5,000	\$5,000
Treasurer	3,250	3,750	3,750	4,250
City Clerk	2,500	3,000	3,500	3,500
City Solicitor	4,000	4,000	4,000	5,000
Auditor	2,500	3,000	3,000	3,500
Assessor	1,600	1,700	1,700	2,000
Total	\$17,850	\$20,450	\$20,950	\$23,250
	1867	1869	1871	1873
Mayor	\$5,000	\$5,000	\$5,000	\$5,000
Treasurer	4,500	5,000	5,000	5,000
City Clerk	4,000	4,500	5,000	5,000
City Solicitor	5,000	5,000	5,000	5,000
Auditor	4,000	4,500	5,000	6,000
Assessor	2,500	2,500	3,000	3,000
Total	\$25,000	\$26,500	\$28,000	\$29,000

The rise in the total salaries of these officers from \$17,850 in 1860 to \$29,000 in 1873 represented an increase of 62 per cent in this period.

But one extraordinary expenditure occurred under general government, the erection of the long-needed city hall. The refitting of the old court house in 1840 had only suspended the agitation for a new building. Beginning with 1850 the overcrowded condition of the structure demanded the attention of successive city governments.² In 1860 a committee reported a plan which contemplated the enlargement of the old building at a cost of \$100,000. In his inaugural of 1861 Mayor Wightman, however, urged the erection of an entirely new building. He

¹ *Mayors' Inaugurals*, ii, p. 326 (1865).

² *City Documents*, no. 44 (1862), p. 11.

believed it could be obtained with but little more expenditure.¹ A similar recommendation in 1862 induced the city council to accept the report of a committee, favoring an appropriation of \$160,000 for a new building.² The corner stone was laid December 22, 1862. On this occasion the Mayor stated that the present was a most appropriate time for beginning the work, since the finances of the city were good and money, abundant and cheap.³

The modest estimate of \$160,000 was soon left far behind in the rising prices of the next few years. A few days after the optimistic speech of Mayor Wightman, his successor, Frederick Walker Lincoln, pointed out that contracts already made called for an expenditure of \$144,000. Other requisites, he said, "have not been contracted for, and have been estimated by competent judges at \$123,800."⁴ A year later he was able to calculate its probable cost at between three and four hundred thousand dollars.⁵ When the construction account was finally closed in 1865, the entire expenditure amounted to \$505,191.⁶ A part of this increase over the estimates was, of course, due to the higher cost of labor and materials. The larger part was, however, the result of changes in the original plans.⁷

At this time there sprang up the practice of junketing, which, though not a source of great expenditure, was an index of a change in the attitude of the city council. The greater demands upon all city officers at this period obliged them to give a much larger amount of their time to municipal affairs. Consequently, it was very easy for an unpaid body to allow itself to "square the account, by eating, drinking, and riding at the city's expense."⁸ This practice was a source of great irritation to the tax-payers, as their frequent comments make plain.⁹

¹ *Mayors' Inaugurals*, ii, p. 233 (1861).

² *City Documents*, no. 44 (1862), p. 31; *Memorial History*, iii, p. 267.

³ *Mayors' Inaugurals*, ii, pp. 263-272 (City Hall Address).

⁴ *Ibid.*, p. 282 (1863).

⁵ *Ibid.*, p. 302 (1864).

⁶ *Auditor's Report* (1865), p. 12.

⁷ *City Documents*, no. 2½ (1866), p. 69.

⁸ Bugbee, "Memoir of Samuel Foster McCleary," in *Massachusetts Historical Society Proceedings*, October, 1901, p. 7.

⁹ *Memorial History*, iii, p. 268.

Police. Expenditure for police increased considerably during this period, rising from \$230,837 in 1860 to \$736,396 in 1873. In the years 1868 to 1871 it demanded 5.6 per cent of the total expenditures compared with 7 per cent in the period 1854 to 1857. The per capita figure increased from \$1.24 to \$2.32. The causes of this growth were the rise in individual salaries, due to the higher cost of living and the increase in the number of the force due to the exigencies of the War period and to the annexations.

Early in the period an attempt was made to transfer the appointment of the police to the state authorities. The feeling that better service would thus be secured was considerably increased by an incident which happened on January 24, 1861. On that day a disturbance arose at the annual meeting of the Anti-Slavery Society in Tremont Temple. Without seriously attempting to maintain order, Mayor Wightman forbade the continuance of the meeting which had been adjourned until evening. Many felt that the Mayor should have allowed the meeting to take place, relying on the police to keep order. The movement for a change in control went as far as the appointment of a committee by the General Court, which took testimony on conditions in Boston. The desire for local self-government was too strong, however, to permit such a change.¹

Expenditure for the department exclusive of the expenditure for station houses, did not rise much until 1863, when it increased from \$250,661 to \$328,194.² This growth was due both to an increase in the force and to the raising of the pay of a large part of the officers.³ The increase in the force was due to the greater protection needed during the War period. In his report for 1862 the chief of police stated that "the labors of the Police Department have been very greatly increased by important, new and arduous duties growing out of the unnatural civil war in which the country has been plunged by mad disorganizers and fanatics." He mentioned as an example the work of arresting deserters on

¹ *Memorial History*, iii, p. 266.

² See Appendix, p. 355. The expenditure for station houses began in 1861.

³ *City Documents*, no. 6 (1864), p. 37.

request of military commanders.¹ The sum of \$30,000 was spent in putting down the draft riot of July 14, 1863.²

This memorable affair started in the North End with the assault of two assistant provost marshals by a woman, upon whose husband the officers were seeking to serve notice. Policemen who came to their rescue were set upon by the mob, and almost beaten to death. Almost immediately the whole North End was in arms, driving the police of that district to their station house. Mayor Lincoln displayed great courage and ability. He gathered together at once the few military companies in the city. A charge of well-directed grapeshot repelled an assault on the Cooper Street Armory. At Dock Square, whither it had gone to sack a gun store, the crowd was finally dispersed. No further trouble was met in carrying out the conscription.³

The fear of another uprising led to the increase of the force in 1864 to 350 men. In his inaugural of 1865 Mayor Lincoln stated that the length of the beat had been diminished, and the department placed in better position "to act with efficiency in case of tumult or riot." He pointed out, however, that the number of the force was not large; that an addition of one hundred men would be needed to make the ratio to population equal to that in New York.⁴ From \$328,194 in 1863 the expenditures steadily increased to \$454,079 in 1866.

Even after its termination the effect of the War was seen in police expenditures. An increase in the force to 375 in 1865 was due, according to the Mayor, to "the erection of buildings on former unoccupied territory, and the dispersion throughout the community, especially in our large cities, of a class of men who were the unworthy hangers-on of our patriotic army."⁵ In his inaugural for 1867 Mayor Norcross stated that within the last few years the number of crimes had gradually increased.

This increase in expenditure seemed to many unnecessary⁶ and in 1867 the force was reduced to 344 men.⁷ Expenditures fell

¹ *City Documents*, no. 6 (1863), p. 3.

² *Ibid.*, no. 6 (1864), pp. 31-35.

³ *Memorial History*, iii, pp. 269-271.

⁴ *Mayors' Inaugurals*, ii, pp. 341, 342 (1865).

⁵ *Ibid.*, p. 400 (1866).

⁶ *City Documents*, no. 71 (1868), p. 3.

⁷ *Mayor's Inaugural* (1868), p. 26.

from \$454,079 in 1866 to \$433,944 in 1867. But the growth of the city, especially by annexation, did not allow the force to remain small; by 1873 it consisted of 533 officers, demanding an expenditure of \$683,892. Mayor Pierce considered the force still too small. He stated that there was no other commercial city in the country of equal extent which was protected by such a small number of policemen.¹

In the Great Fire of 1872 very efficient service was rendered by the police in protecting and restoring property. About \$400,000 worth of property was taken from persons carrying away spoils.²

The method of appointing the officers was changed in 1863. Hitherto appointments had been made annually, a practice denounced by the chief of police as detrimental to the discipline and efficiency of the department.³ Henceforth, they were to hold during good behavior.⁴

Fire. Expenditure for protection from fire gained in relative importance during this period. The rise from an average expenditure of \$101,559 in the years 1854 to 1857 to \$406,033 in the period 1868 to 1871 meant an increase from 3.7 per cent to 4 per cent of the total expenditure. Meanwhile the per capita figures grew from \$0.63 to \$1.62.

At the close of the last period the department was in a state of transition. The old hand engines were being replaced by steam engines, and horses were beginning to be employed in drawing the hose carts. In his inaugural of 1860 Mayor Lincoln referred to the change as satisfactory, stating that it had made possible a reduction in the number of the force from over 700 to 422.⁵ In 1860 the transition became complete, diminishing still farther the size of the department.⁶ The years 1860 to 1862 saw practically no change in expenditures, the saving in the size of the force being offset by an increase in the number of men in constant service and more expensive equipment. The rise from \$106,338 in 1862 to

¹ *Mayor's Inaugural* (1873), p. 19.

² Conwell, *Great Fire in Boston*, pp. 216-218.

³ *City Documents*, no. 6 (1863), p. 37.

⁴ *Ibid.* (1864), p. 19.

⁵ *Mayors' Inaugurals*, ii, p. 212 (1860).

⁶ Brayley, *History Boston Fire Department*, p. 233.

\$157,077 in 1864 was largely the result of increases in pay given in 1863 and 1864.¹ The advance to \$189,417 in 1865 was due to greater activity in the construction of engine houses.²

The rise in expenditures which began in 1863 continued through 1873, becoming very rapid in the last two years of the period. The upward movement was accelerated by further increases in pay in 1866³ and 1868.⁴ Wages reached their height in 1868; since 1862 they had risen from 75 per cent to 100 per cent. The rapid growth of expenditures after 1868 was due to an increase in the force and equipment made necessary by the growth of the city. The very extraordinary rise from \$491,394 in 1871 to \$736,526 in 1872 and \$812,205 in 1873 records the effect of the Great Boston Fire.

The fire started about seven o'clock on Saturday evening, November 9, 1872 at the south-east corner of Summer and Kingston Streets. A delay in giving the alarm, the blame for which has never been placed, allowed the conflagration to gain great headway before the arrival of the fire department. The fire occurred, moreover, at a most inopportune time; for over a week a distemper had made useless practically all the horses in the city. The committee on the fire department had sought to make the force as efficient as possible, however, by doubling the number of men.⁵ The work was further hindered by lack of water, the pipes not being large enough to keep the engines supplied. This difficulty had been encountered at earlier fires. In his report for 1867 Chief Damrell stated that "during the past three years, at large fires, much difficulty had been experienced for the want of an adequate supply of water for our steam fire-engines."⁶ Though the condition was somewhat improved before 1872, the difficulty had not been entirely removed.⁷ The construction of the buildings aided the fire, the Mansard roof, for example, being

¹ Brayley, *History Boston Fire Department*, pp. 244-246.

² See Appendix, p. 357.

³ Brayley, *History Boston Fire Department*, p. 250.

⁴ *Ibid.*, p. 258.

⁵ *Ibid.*, pp. 272, 273.

⁶ *Ibid.*, p. 253.

⁷ *City Documents*, no. 50 (1873), p. viii.

an easy prey to the flames.¹ When the fire was finally checked, it had burned over 65 acres, the heart of the business district, and had destroyed \$75,000,000 worth of property.²

Boston found herself on Monday, November 11th with a tremendous problem. The city must repair the damage as soon as possible, and also make adequate provision against the recurrence of such a calamity. The report of the commissioners appointed by the mayor to investigate the fire outlined the needed reforms. They urged legislation requiring fire-proof construction, the installation of larger pipes, and more and better hydrants. They also demanded "more fire apparatus, more men and more powerful engines." They criticized the conduct of Chief Damrell during the fire, believing that he had given too much attention to details. The course followed by the chief was approved, however, by the chief engineers of Eastern Massachusetts, at a meeting held in Charlestown several days after the fire.³ A joint standing committee likewise reported that the disaster was not due to mismanagement of the department, but to an insufficient supply of water.⁴

At the request of the city council the governor called the legislature together in special session. Among the acts passed was chapter 260 of 1872, which provided "for the regulation and inspection of buildings, the more effectual prevention of fire, and the better preservation of life and property in Boston." The city government was quick to learn the lessons taught by the disaster. The great expenditures of 1872 and 1873 record the spending of money for a more efficient fire department.

The Great Fire of 1872 served to strengthen a conviction that the control of the fire department should be given to an independent paid board. This course was recommended by Mayor Pierce in 1873, but met with great opposition. Many felt that the proposed change was a reflection on the conduct of the firemen themselves. But for another serious fire on May 30th, the movement might not have succeeded. Finally, on October 24 an ordinance

¹ *City Documents*, no. 50 (1873), p. vi.

² *Mayor's Inaugural* (1873), p. 7.

³ Conwell, *Great Fire in Boston*, p. 206.

⁴ *City Documents*, no. 43 (1873), p. 4.

was passed, giving the mayor power to appoint with the approval of the city council three paid fire commissioners to hold office for three years. The commissioners were to select all the members of the department, and to fix their compensation. The confidence of underwriters in the new organization was shown by material reductions in insurance rates.¹

In 1872 the city purchased its first fire boat, paying \$31,002 for it.² This boat made possible the more adequate protection of the water front.

Institutions. Expenditures for the institutions increased from \$229,709 in 1860 to \$779,584 in 1873. In relative importance, however, they fell from 9 per cent of the total city expenditures in the years 1854 to 1857 to 6.3 per cent in the period 1868 to 1871. Meanwhile the per capita figure rose from \$1.52 to \$2.60. The rise in expenditure from \$229,709 in 1860 to \$525,512 in 1865 was largely the result of the addition of a city hospital and the relief given those dependent on soldiers. The continued increase in expenditure to \$779,584 in 1873 may be attributed to the growth of population. Population grew from 177,840 in 1860 to 341,919 in 1875. In 1871 the increase of the poor, insane and criminal classes had "crowded our institutions beyond the capacity which health, comfort and safe-keeping demand."³

In July, 1864, control over outdoor alms was taken from the overseers and given to a new board, consisting of twelve residents of Boston, elected by the city council and responsible to it. The new overseers were to hold office for three years, and to be selected irrespective of wards. Chapter 128 of 1864, which made this change possible, forbade any overseer or member of the department to be interested in any contract unless authorization was given by a recorded vote of the board. Though the city council had long felt that money was wasted in this department, it was not until the expenditures of the overseers had reached \$90,140 in 1862, greatly exceeding the appropriation, that the council was able to obtain the change.⁴ A committee, of which

¹ *Memorial History*, iii, p. 282.

² *Auditor's Report* (1872), p. 21.

³ *City Documents*, no. 76 (1871), p. 27.

⁴ For a detailed statement of expenditures for institutions see Appendix, p. 359.

Alderman Norcross was chairman, brought out the irresponsible methods of the overseers. In 1863 the city council forced the board to do its work on only \$39,000.¹ In his inaugural for 1865 Mayor Lincoln stated that henceforth "the swarm of beggars, who in the winter time took up their abode with us, to live upon our alms, will be forced to labor for their living."²

In 1865 a great advance was made in the method of giving alms by the completion of a central office building at a cost of about \$200,000 including the cost of the land. Part of the money came from subscriptions.³ Here shelter could be provided not only for the overseers but also for many private charitable organizations. Henceforth great economy was secured through the coöperation of these various agencies. The building also served as a temporary home for the destitute. The charitable funds administered by the overseers amounted in 1870 to \$250,000.⁴

The cost of maintaining the houses of industry and reformation rose gradually from \$76,917 in 1860 to \$87,202 in 1865, when the growth of the city required expenditure for a much larger number of inmates; in 1873 the expenditure had reached \$191,730. Throughout the period agitation for a more scientific separation was carried on to even better purpose than in previous years. In March, 1860, a new house of reformation was completed, which was arranged to allow the separation of the vicious boys.⁵

In the house of industry were sheltered, though in different parts of the building, both the pauper and the criminal. The provisions of the Massachusetts statutes were partly responsible for this practice. These gave cities permission to sentence persons convicted of certain minor offences either to the house of industry or to the house of correction. Boston took advantage of this law to such an extent that on the first of January, 1862, of the 453 persons in the house of industry 274 were serving sentence.⁶

¹ *Mayor's Inaugural* (1868), p. 47; *Memorial History*, iii, pp. 271, 272.

² *Mayors' Inaugurals*, ii, p. 339 (1865).

³ *Mayor's Inaugural* (1868), p. 45.

⁴ *Ibid.* (1870), p. 89.

⁵ *Auditor's Report* (1860), p. 255.

⁶ *Ibid.* (1861), p. 268.

The movement for a better classification found its opportunity, when toward the end of the period the growth in the number of inmates made the erection of a new building imperative. In 1870 an order was passed, appropriating \$225,000 for a new almshouse on Deer Island, intended solely for the paupers. The council failed, however, to authorize the directors of the public institutions to proceed with its construction.¹ Attention was then turned to the question of finding an abode for the paupers far removed from that of the criminals. In 1872 the overcrowding was somewhat relieved by the removal of the male paupers to Rainsford Island.² In his inaugural of 1873 Mayor Pierce expressed the opinion that the removal of the paupers from the house of industry would allow ample accommodation there for those committed as criminals.³ The city council decided on Austin Farm in West Roxbury as a site for the new almshouse, and in 1873 this property was purchased at a cost of \$75,000.⁴

The house of correction remained at South Boston throughout the period. The people of the peninsula never lost the feeling that their home was made the "Botany Bay" of the city. In 1872 petitions for the removal of the institution were endorsed by a committee of the council. In its report the committee asked whether there was not land enough at Deer Island for a new house of correction.⁵ The site at South Boston was becoming too valuable for business purposes to be used for a city institution.⁶

By 1860 the lunatic hospital erected in 1839 had become inadequate.⁷ Instead of boarding her insane in the state asylums, Boston had cared for them in her own institution, enabling the unfortunates to be near their families. This was rather expensive, however, inasmuch as Boston had to meet as well her share in the cost of the state institutions, paid for in part out of the state tax. The urgent requests of the directors for

¹ *City Documents*, no. 63 (1871), p. 3.

² *Auditor's Report* (1872), p. 301.

³ *Mayor's Inaugural* (1873), p. 21.

⁴ *Auditor's Report* (1873), p. 58.

⁵ *City Documents*, no. 106 (1872), p. 9.

⁶ *Mayor's Inaugural* (1873), p. 20.

⁷ *Auditor's Report* (1862), p. 271.

a new building led the city council in 1865 to purchase at a cost of \$28,000 one hundred and eighty-four acres of land in the town of Winthrop. Plans for a very elaborate structure, involving an expenditure of a half million dollars, were prepared. The magnitude of this undertaking in a time of inflated values called forth a word of warning from Mayor Norcross in his inaugural of 1867. He asked the city government to bear in mind "that a change in the currency may leave us with a debt to be paid at its nominal amount, and with property worth much less than its cost."¹ When the city council later in the year passed an order appropriating \$100,000 with which to commence the erection of the hospital, the Mayor promptly vetoed it, giving as his reason for this act his belief that the cost would be nearer \$800,000 than \$500,000, and adding that it was a bad time for such a task. He also objected to the establishment of a city institution outside the limits of Boston. The strength of the movement for liberal expenditures is seen in the fact that the order was passed over the Mayor's veto by the aldermen, and lacked only seven votes in the common council.²

The courageous stand of Mayor Norcross against such an elaborate structure saved the city much needless expenditure. The city council came to take a more sensible view of the situation, and in 1873 petitioned the General Court either for an allowance equal the amount assessed upon the city for the support of the insane or for the establishment of a hospital near Boston. Chapter 239 of the Acts of 1873 provided for the building of a hospital in the north-eastern part of the commonwealth. The institution was shortly afterwards erected at Danvers.³

In 1860 the city council set apart a portion of the public lands in the South Bay territory as a site for a city hospital.⁴ With the breaking out of the War the number of those needing medical treatment naturally increased.* Consequently, a committee in 1861 recommended the immediate construction of the hospital, adding that many were out of employment and that materials

¹ *Mayors' Inaugurals*, ii, p. 421 (1867).

² *City Documents*, no. 120 (1867); *ibid.*, no. 76 (1871), p. 14.

³ *Ibid.*, no. 129 (1873), p. 4. ⁴ *Mayors' Inaugurals*, ii, pp. 233, 234 (1861).

were one-fifth cheaper than a year ago.¹ Work upon the hospital was begun in the same year, and on June 1, 1864 the institution was opened.² The opening of the hospital relieved the overseers of the task of providing medical attention in cases of temporary illness. A bequest of about \$25,000 for a hospital, made by Elisha Goodnow who died in 1851, aided the city in the establishment of the institution.³ By ordinance of December 23, 1862 provision was made for the government of the hospital. The city council was to elect a board of eight trustees, two to be chosen from the aldermen, three from the common council and three from the citizens at large.

The annual reports of the trustees of the hospital indicate that the institution was supplying a much-needed want. The number of patients grew to such an extent that by 1870 more room was required.⁴ The extraordinary expenditure for 1872 recalls the visit of the small-pox, which made necessary the expenditure of \$162,000 for the fitting up of special hospitals to deal with the epidemic.

The expenditure for institutions was greatly increased from 1861 onward by monthly payments to those dependent upon soldiers and sailors. This money was expended under authority of Chapter 222 of 1861, in which the state agreed to reimburse towns and cities for the money thus appropriated. This expenditure, which rose as high as \$293,987 in 1864, was practically all repaid by the state, the small part falling upon the city being the result of failure to establish the claim of the recipient in every case.⁵ The act of 1861 was modified slightly by subsequent acts, and in 1866 gave way to chapter 172 of that year, which provided for monthly payments to those disabled in the service and to widows and minor children, reimbursement to be made from the state treasury.⁶ With the enactment of chapter 172 of 1866, this branch of expenditure fell to about \$100,000.

¹ *City Documents*, no. 34 (1861), p. 16.

² *Mayors' Inaugurals*, ii, p. 340 (1865).

³ *City Documents*, no. 75 (1862), p. 9.

⁴ *Mayor's Inaugural* (1870), pp. 92, 93.

⁵ *Mayors' Inaugurals*, ii, pp. 316, 317 (1864).

⁶ *City Documents*, no. 54 (1866).

Public Grounds. The movement for parks and public grounds assumed great importance toward the end of this period. The expenditure of this branch rose from an average of \$38,275 for the years 1854 to 1857 to \$139,261 in the period 1868 to 1871. It constituted at the latter time 1.3 per cent of the total city expenditures. Meanwhile the per capita figure had increased from \$0.24 to \$0.55. The rise in the expenditure of this branch was due to the development of the Public Garden and the laying out of a number of little plots throughout the city. In the years 1866 to 1870 a large amount was also expended for the pleasure drive-way around Chestnut Hill Reservoir.

In 1869 the desire for the reservation of a large area for park purposes became so strong as to call forth a petition to the city council. This document bore the signatures of a large number of the leading taxpayers. A committee was appointed to hear the interested parties.¹ Its report stated that the public hearings had clearly shown that the people wanted "a large park or several small parks in Boston or the immediate vicinity."² On recommendation of this committee the city council asked the General Court to authorize the purchase of lands for one or more parks.³ Chapter 283 of 1870 was obtained.

This act provided for the appointment of a mixed commission, four members to be selected by the governor and four by the city council. These eight, acting with the mayor, were to constitute a board of park commissioners, with power to take land for parks as they saw fit, but not to expend over \$50,000 annually for their care and improvement. Real estate might be assessed to one-half the benefit. The city might issue bonds to pay for the land taken. The act was not to take effect until accepted by two-thirds of the legal voters. The objectionable features of the act were the provision for a mixed commission, Boston wishing to manage her own affairs, and the power given the commission to buy lands without previous authorization by the city council. Furthermore, the act contemplated the taking of a portion of the

¹ *Mayor's Inaugural* (1877), p. 16.

² *City Documents*, no. 123 (1869), p. 3.

³ *Mayor's Inaugural* (1874), p. 25.

land outside the city. It was not unnatural, therefore, that the act lacked the requisite two-thirds vote. The large number of votes it did receive, more than a majority of those cast, testified to the strength of the park movement in Boston.¹

The rejection of the act of 1870 was but a temporary check. In November, 1873, an order of the city council called for a joint special committee to investigate the subject.² In his inaugural of 1874 Mayor Cobb strongly recommended the renewal of proceedings for the attainment of the necessary legislation. He pointed out that the annexation of West Roxbury brought the necessary amount of land within the limits of the city.³

Streets. Under the rule of economy enforced throughout the War, street expenditures declined from \$1,196,113 in 1860 to \$645,562 in 1863. From this point they rose, slowly at first, and, then, with the coming of peace, rapidly to \$1,719,145 in 1867, \$5,619,640 in 1869 and \$9,382,860 in 1873. In the period 1854 to 1857 this branch made up 33.8 per cent of the city expenditures, or \$5.71 for every inhabitant; in the years 1868 to 1871 its relative importance rose to 45.7 per cent, a per capita charge of \$18.74.⁴

Streets Proper. When the War came with its great demands upon the city, it was only natural that the city council should retrench in expenditures that could be postponed. One of these was that for streets and particularly the expenditure for widening and extending. Expenditure for streets proper fell as low as \$220,225 in 1863.

The rise in expenditures to \$432,583 in 1866 is partly explained by the higher cost of labor and supplies. Though the crowded condition of many of the business streets demanded their widening, it was felt that improvements of that nature must await more prosperous days.⁵ After the War a very great rise in expenditure for streets took place. From \$432,583 in 1866 the expenditure increased to \$907,140 in 1867 and \$3,302,977 in 1869; then, after

¹ *Mayor's Inaugural* (1874), p. 25.

² *Ibid.* (1877), p. 17.

³ *Ibid.* (1874), p. 25.

⁴ For street expenditures in detail see Appendix, p. 362.

⁵ *Mayors' Inaugurals*, ii, p. 303 (1864).

a halt of two years the figures rose suddenly to \$4,306,639 in 1872 and \$7,369,398 in 1873.

The years 1867 to 1873 are remarkable for the large number of improvements of great magnitude undertaken by Boston. The cost of practically all falls within expenditure for streets and kindred objects, and a large part within expenditure for streets proper. The first great undertaking to increase the cost of laying out, widening and extending streets was the reduction of Fort Hill. This eminence, covering about twenty acres, had once been crowned by a pleasant park, Washington Square, where lived many of the wealthy citizens. The growth of the business section had left this area to the poorest inhabitants. This once attractive hill, now covered with unsightly tenements and devoid of grass, stood in the way of the rapidly advancing wholesale section. In 1865 the city secured the legislative authority necessary for the reduction of Fort Hill.¹

Chapter 159 of the Acts of 1865 gave the city extraordinary powers to take private property and assess damages. The principal part of the cost was to be assessed upon abutting estates in proportion to their value, as appraised by the mayor and aldermen. In case an owner chose, he might surrender his estate at any time before the estimation of damages, accepting the valuation determined by the mayor and aldermen. Remedy through petition for a jury trial was left open to those aggrieved. The act was granted upon petition of owners of estates in the section, upon whom a large part of the cost was expected to fall.²

The work of reduction was begun on October 15, 1866, and finished July 31, 1872. The workmen found no little difficulty in persuading the inhabitants to leave their homes. Some clung to their houses "until the roofs were taken off, and their rooms laid open to the sky."³ The average reduction was twenty-five feet,⁴ and in the entire work 547,000 cubic yards of earth were carried off.⁵ The work of removal was somewhat delayed for three

¹ *Memorial History*, iii, p. 272.

² *Mayors' Inaugurals*, ii, p. 416 (1867).

³ *City Documents*, no. 6 (1867), p. 14.

⁴ *Auditor's Report* (1866), p. 19.

⁵ *Memorial History*, iii, p. 272.

years for lack of a convenient place to deposit the earth. Finally, the construction of Atlantic Avenue, referred to below, gave the desired opportunity. It was an easy matter to carry the earth by an elevated railroad to the docks.¹ The total cost of the improvement amounted to \$1,575,000.² The net cost to the city was much larger than was expected. Instead of being less than a half million dollars, the figure estimated by a committee in 1869,³ inability to obtain the desired amount from betterments, made the cost about a million dollars.⁴ For this expenditure, however, twenty acres were added to the business area of Boston. In carrying out the improvement the city took a considerable amount of land, surrendered by the owners. While this was awaiting sale, it was rented as a site for temporary structures to shoe and leather firms burnt out on Pearl St.⁵

The next great improvement was the replacing of the district from Rows Wharf to the East Boston Ferries, "a ragged fringe of streets, with its old-fashioned wharves reaching out here and there to deep water,"⁶ by a broad marginal street, Atlantic Avenue. This work, determined upon by the city council of 1868, contemplated the filling in of a part of the old docks, thus adding to the land available for building and furnishing in the proposed avenue better transportation to the wharves.⁷ In laying out the street, the coöperation of the abutters in the matter of damages and betterments was fortunately secured.⁸ The total cost of the undertaking, which occupied the next four years, was about \$2,500,000.⁹

The great activity in street expenditure was due in part to the passage in 1866 of an act which the city council had long tried to secure. Chapter 174 of that year, entitled "An Act concerning the laying out, widening and improving the streets of Boston," gave the board of aldermen full power to take land for street

¹ *Mayor's Inaugural* (1870), p. 65.

² *Memorial History*, iii, p. 272.

³ *City Documents*, no. 70 (1869), p. 6.

⁴ *Auditor's Report* (1872), p. 38.

⁵ *Ibid.*

⁶ *Bostonian Society Proceedings*, January 12, 1892, p. 17.

⁷ *City Documents*, no. 128 (1868).

⁸ *Ibid.*, no. 143 (1868), p. 26.

⁹ *Memorial History*, iii, p. 276.

purposes and to assess upon the abutters not over one-half the adjudged benefit. The force of this act was somewhat modified by subsequent amendments. Thus chapter 276 of 1868 stipulated that the benefit must be "beyond that general advantage which all real property in the said city may receive therefrom," and that in no case should the "assessment exceed the amount to be paid by the said city for such laying out, widening, discontinuance, grading or alteration." Boston, then, might assess upon abutting property its proportionate share of the cost up to one-half the special benefit derived. In his inaugural of 1867 Mayor Norcross expressed the prevailing opinion of the advantage secured by this act, when he remarked that "if this law shall be judiciously administered, it will correct evils which have long been felt to exist, and tend to equalize the burden consequent upon the widening of our narrow streets."¹

In the movement for better streets the needs of South Boston, so much neglected in the past, were consulted. During the sixties South Boston increased over 50 per cent in population and over 100 per cent in taxable property. Such growth justified an expenditure of nearly a million dollars in 1869 in extending Broadway across Fort Point Channel to Albany Street, and an expenditure of about a half million dollars in widening Federal Street, which had been the principal thoroughfare to the peninsula.²

The great rise in expenditure for the widening and extending of streets to \$3,349,824 in 1872 and \$6,403,923 in 1873 was due in great measure to improvements in the burnt area. Among the resolutions of the general relief committee, was one demanding that immediate advantage be taken of the unusual opportunity offered of straightening and widening the narrow thoroughfares of the district.³ In his inaugural of 1873 Mayor Pierce remarked that "the best form in which we can commemorate the great disaster which has overtaken us is by establishing wider streets in the district covered by fire, and improved methods in the con-

¹ *Mayors' Inaugurals*, ii, p. 416 (1867).

² *Memorial History*, iii, pp. 276, 277.

³ Conwell, *Great Fire in Boston*, p. 267.

struction of buildings throughout the city.”¹ It was at first intended that the territory should be laid out on an entirely new plan; but, as the city found itself unable to give a good title to land which formed a part of the old streets, Boston was obliged to content herself with the widening and straightening of the old thoroughfares.² The cost of the entire improvement in the burnt area amounted to about \$5,000,000.³

Large sums were also expended in widening streets leading to the depots at the North End. Several streets, among them Columbus Avenue and Dartmouth Street, were laid out in the Back Bay without cost to the city, the land being contributed by the owners of the property benefited.⁴

The great increase in the amount of work which would fall to the board of aldermen in the laying out, widening, and extending of streets strengthened the belief that this body would prove unequal to the task. In 1869 a committee recommended the transfer of this important branch of activity to a board of street commissioners.⁵ On petition of the city council the legislature passed chapter 337 of 1870, which required the voters of the city to elect three men, one to be selected annually, as a board of street commissioners. They were given the powers formerly enjoyed by the aldermen with regard to the laying out, widening, and extending of streets and the abatement of taxes. The reason for intrusting such a body with the abatement of taxes was, in the words of Mayor Gaston, “not readily apparent.”⁶ The act gave the board power to order improvements involving a cost of less than \$25,000 on a single street in any one year. Larger expenditures required the concurrence of the city council. The act was no sooner passed than many began to fear the placing of such great power in an independent board. In his inaugural of 1871 Mayor Gaston advised the city council to ask the legislature to modify the law.⁷ An attempt that year to secure the desired

¹ *Mayor's Inaugural* (1873), p. 10.

² *Memorial History*, iii, p. 283.

³ *City Documents*, no. 6 (1874), p. 6.

⁴ *Mayor's Inaugural* (1870), pp. 62, 63.

⁵ *City Documents*, no. 108 (1869), p. 3.

⁶ *Mayor's Inaugural* (1871), p. 16.

⁷ *Ibid.* (1871), p. 18.

changes was without success,¹ but subsequent legislation curtailed to a certain extent the powers of the commissioners.²

A large part of the great street expenditures of this period was due to the inheritance from the town of crooked and narrow streets. These were but little improved until the growth of the city made their widening absolutely necessary. The blame for this situation Mayor Gaston placed upon some of the early municipal governments, who "failed to foresee and appreciate the future growth, prosperity and wants of the city."³ Though the Mayor's statement may be true to a certain extent, it should be remembered that their inability to levy special assessments limited greatly the amount of widening they could do without very great expenditure.

Lighting. The expenditure for lighting increased very steadily from \$138,282 in 1860 to \$384,760 in 1873. The chief causes of this advance were the growth of the inhabited territory within the city proper and the needs of the annexed communities, but the demand of the citizens for a higher standard of service was another contributing factor. In 1865 a committee stated that soon the citizens would not be contented with the service, which satisfied the town, and would "demand that the streets should be lighted throughout every night in the year."⁴ In the very next year an order, providing this service, passed the board of aldermen, but was defeated in the common council.⁵ In 1867 the demands of the citizens resulted in keeping the lamps burning during the winter months. This added \$30,000 to the cost of maintenance.⁶ In 1868 the work of lighting and caring for the lamps, formerly let out by contract, was placed under the superintendent of the lighting department.

The question of the municipal manufacture of gas, which was apparently never wholly at rest, received consideration during this period. In 1866 a committee reported that water and gas,

¹ *Mayor's Inaugural* (1872), p. 17.

² *Memorial History*, iii, p. 278.

³ *Mayor's Inaugural* (1871), p. 18.

⁴ *City Documents*, no. 113 (1865), p. 4.

⁵ *Ibid.*, no. 136 (1866), p. 5.

⁶ *Mayor's Inaugural* (1868), p. 41.

the two great necessities of a city, should never be sold at a profit, nor be in the hands of private corporations. The high price of materials and labor then prevailing made it inexpedient, however, in the opinion of the committee, to undertake at that time the construction of gas works.¹

Sewers. The great rise in sewer expenditure from \$18,760 in 1864 to \$128,675 in 1865 was due to the building of large outlet sewers at South and East Boston and from the Back Bay territory. To the cost of the Back Bay sewer the Boston Water Power Company contributed \$50,000 under an agreement made in 1864. According to an agreement made at the same time, the state equipped with sewers its territory in the Back Bay.² The annexation of Roxbury in 1868 doubled the expenditures of the sewer department. From \$83,290 in 1868 the expenditure for sewers rose rapidly, reaching \$227,827 in 1873. The large expenditure of \$155,820 for 1869 was partly due to the necessity of constructing a system of drainage for the territory enclosed by the filling in of Atlantic Avenue.³ New sewers were also required in the territory adjacent to the Back Bay, which it had been found necessary to raise.

Public Lands. The work of improving the city lands for sale practically came to an end in 1861 with the completion of the South Bay filling. Beginning with 1860, however, we meet with the first of a series of expenditures for raising the low territory adjacent to the Back Bay. By that time it had become clear that adequate drainage could be obtained only in this way. The raising of Dover and Tremont Streets proceeded through 1862, when the greater demands of the War required its postponement.

The War did not put a stop, however, to the discussion as to the liability of the city for the damage caused by inadequate drainage. The owners of estates in the district maintained that the municipality should bear the entire cost of the improvement.⁴ Though the city was probably not responsible for the situation,⁵ it could

¹ *City Documents*, no. 116 (1866).

² *Mayors' Inaugurals*, ii, pp. 383, 384 (1866).

³ *Mayor's Inaugural* (1870), p. 73.

⁴ *Memorial History*, iii, p. 274.

⁵ *City Documents*, no. 90 (1865), pp. 7-9.

not permit conditions so injurious to the public health. In his inaugural of 1867 Mayor Norcross urged the city council to assume "a reasonable — perhaps liberal proportion of the cost."¹ He recommended petitioning the legislature for an act authorizing the city to raise the Church Street district, and to assess the cost upon the estates benefited. Chapter 308 of 1867 was secured. It allowed the city to take lands by purchase or otherwise and to assess damages. The city council placed the great task in the hands of commissioners and in July, 1868, the work of raising the territory was commenced, the city having taken possession of the land under the extraordinary power granted by the act of 1867.² The law making possible the successful carrying out of this great undertaking contained provisions new to the legislation of the state,³ but it was drawn with such care that it withstood subsequent attempts to question its constitutionality.⁴

The work, successfully completed in October, 1869, involved the raising of thirteen acres of land, thereby increasing its value from 50 per cent to 100 per cent.⁵ The new grade was fixed at eighteen feet above average low water for streets and ways, and twelve feet for cellars, yards, and vacant lots, thus allowing drainage at all times.⁶ It is related that the inhabitants, who continued to live in their homes during the progress of the work, were in many cases "compelled for months to reach their tenements over ladders, in some instances to a height of seventeen feet."⁶ In the settlement of damages and benefits, which were determined by the commissioners, part of the improved land was re-conveyed to the former holders, and part was sold, the old owner being given the value at the time of taking the territory, May 9, 1868. The net cost of the improvement was about \$900,000.⁷

¹ *Mayors' Inaugurals*, ii, p. 419 (1867).

² *Mayor's Inaugural* (1870), p. 94.

³ *Memorial History*, iii, p. 274.

⁴ *City Documents*, no. 105 (1869), p. vii.

⁵ *Ibid.* (1869), p. viii.

⁶ *City Documents*, no. 95 (1869), p. 10.

⁷ *Mayor's Inaugural* (1869), pp. 57-59; *ibid.* (1870), pp. 94-96.

The success of the Church Street venture induced the city council to continue the improvement southward into the Suffolk Street district. Chapter 277 of 1868 was obtained, giving the same powers as in the Church Street district.¹ Possession of the land was taken July 13, 1870,² and the work, commenced in that year, was completed in 1872. A net expenditure of \$1,600,000, or \$750,000 less than the original estimates,³ gave the city thirty-one acres of drained territory.⁴ The grade established was the same as in the Church Street district.⁵ The increase in the value of the territory was very great. After being practically stationary for many years, the valuation of real estate in this section rose 124 per cent.⁶

In the very last year of the period the city was preparing to extend the improvement southward to Roxbury. Under authority of chapter 340 of 1873 owners of real estate between Northampton and Eustis Streets were required to raise their land to a grade not less than twelve feet above mean low water. In case they did not comply with the order before April 1, 1874, the city was given power to carry out the work, assessing the cost upon the owners of the improved property. The success of these great drainage improvements was measured not only by the increase in valuation but also by the advance in the health and comfort of the citizens.

During this period the city came into possession of about two hundred acres of excellent land in the Back Bay. This was already laid out in streets, provided with sewers and edgestones. The only expenditure resulting from this acquisition was the cost of paving and maintaining the streets and ways. The attitude of the city government toward this improvement was well expressed in the inaugural of Mayor Wightman. He states that it is "a gratifying circumstance, that the large area of the Back Bay is to be graded and made taxable property within the limits of

¹ *City Documents*, no. 109 (1869), p. vi.

² *Mayor's Inaugural* (1871), p. 19.

³ *Ibid.* (1873), p. 28.

⁴ *City Documents*, no. 102 (1871), p. 3.

⁵ *Ibid.*, no. 105 (1869), p. vii.

⁶ *Ibid.*, no. 136 (1873), p. 9.

Boston, without the great expense which has heretofore characterized similar undertakings by the City Government.”¹

Bridges. The improved means of communication given to South Boston during the period required considerable expenditure for bridges as well as streets. Thus the \$65,000 expended on the Albany Street Bridge in 1867, the \$60,000 spent in 1870 for the bridge on Mt. Washington Avenue, and the expenditure in 1872 of \$80,000 for the widening and rebuilding of the Federal Street Bridge, all contributed to the welfare of South Boston. The large expenditure accorded to South Boston was used as an argument by the people of East Boston for an expenditure of an equal amount for better ferry communication.² The large sum of \$318,277 expended for bridges in 1872 was partly due to the construction of two iron bridges over the railroad tracks in the Back Bay and the cost of extensive repairs on Warren Bridge.

Ferries. On April 1, 1870 the city began the operation of the two lines of ferries running between East Boston and the city proper. For a short time after the granting of the subsidies at the end of the last period, the ferry companies held to their agreement. In July, 1860, however, continued deficits led both companies to raise the rates to amounts more burdensome than any previously imposed. The East Boston Ferry Co. made this advance on the assurance of eminent counsel that the original provisions in the charter made void the agreement of 1859. No attention was paid by the companies to a schedule of tolls fixed by the aldermen on July 23.³

The city council then attempted to secure the adoption of its schedule by granting further subsidies. The People's Ferry Co. agreed to run at the prescribed rates on payment of \$1,250 a month. This payment lasted but four months, beginning January 1, 1863.⁴ After that, its capital being spent, the company decided to liquidate. In the subsequent settlement the stockholders received \$1.00 a share.⁵

¹ *Mayors' Inaugurals*, ii, p. 228 (1861).

² *Memorial History*, iii, p. 277.

³ *City Documents*, no. 71 (1861), p. 5; *ibid.*, no. 220 (1894), p. 155.

⁴ *Auditor's Report* (1862), p. 117.

⁵ *City Documents*, no. 220 (1894), p. 155.

The dissolution of the People's Ferry Co. left but one ferry in the field and for a time it looked as though the East Boston Ferry Co. could meet the requirements of the city. By 1866 the ferry had added about 90 per cent to its capacity,¹ and in his inaugural of 1867 Mayor Norcross stated that the troublesome question had been at last settled.² In 1865 the company had agreed to run a second ferry from the old slips of the People's Ferry, if the city would put these in repair. During the years 1865 to 1868 the city was refitting these approaches and slips, leasing them in 1868 for a nominal sum.³ Before the end of 1868 the company petitioned for an increase in tolls, and upon the refusal of the aldermen to grant their request obtained a writ of mandamus. This the board saw fit to obey.⁴

The experiment of controlling the ferry by regulation had been unsuccessful. In his inaugural of 1869 Mayor Shurtleff suggested municipal ownership.⁵ That year, on petition of 2,600 citizens, including most of the large business firms in all sections of the city, the city council applied to the legislature for power to purchase and operate the ferry.

Chapter 155 of 1869 gave the city council power to purchase by mutual agreement the property of the East Boston Ferry Company. Under order of October 15, 1869, a committee was authorized to offer as much as \$275,000.⁶ The company accepted this proposition, and on April 1, 1870 the city became the sole owner of the East Boston ferries.⁷ At the start a considerable amount had to be expended in repairs, for the property was turned over in a "somewhat dilapidated condition."⁸ The annual expenditure for ferries during the last four years of the period averaged \$250,000.

Health. The demand for higher standards of cleanliness caused a rise in the expenditure for public health from \$141,933 in

¹ *Ibid.*, no. 83 (1866), p. 7.

² *Mayors' Inaugurals*, ii, p. 425 (1867).

³ *Mayor's Inaugural* (1868), p. 62.

⁴ *City Documents*, no. 220 (1894), p. 156.

⁵ *Mayor's Inaugural* (1869), pp. 66-69.

⁶ *City Documents*, no. 115 (1869), p. 3.

⁷ *Mayor's Inaugural* (1870), p. 111.

⁸ *City Documents*, no. 54 (1870), p. 5.

1860 to \$503,276 in 1873. In 1865 the apprehended approach of the cholera led to a cleansing of the city, which confined the disease in 1866 to only a few cases.¹

In 1860 a joint special committee was appointed "to consider and report what measures, if any, can be adopted to provide such facilities for cheap bathing as will induce all persons to avail themselves of the means provided." The report of the committee recommended the establishment of public baths,² but the adoption of this suggestion had to await the termination of the War. In 1866 six free bathing houses were provided for the use of the citizens during the summer months at an expenditure, including attendance, of \$17,000.³ The experiment of 1866 was highly successful. In his inaugural of 1870 Mayor Shurtleff remarked that the benefit had been so great as to be noticed by strangers, and that other large municipalities had adopted the institution.⁴ The expenditure for public health was also increased in 1866 by the purchase of a steam dredging machine for cleaning the docks near the outlet of sewers and for other work in the harbor.⁵

The control of the health of the city had been since 1849 in the hands of the aldermen. Only in times of emergency had they been aided by a board of consulting physicians elected by the city council. The growth of the city naturally gave rise to many difficult problems of sanitary science, the solution of which required the judgment of experts. The aldermen, however, were loath to admit their incapacity, and would not always be guided by the advice of the consulting physicians. As a result, it became difficult to secure the services of prominent physicians on the board. The growing sentiment in favor of a change in the control of the health department was much increased by the report of a committee appointed in 1871 to investigate complaints concerning the sale of bad meat. The investigation brought out the fact that no proper restrictions existed, and made clear the necessity for a more efficient administration of the health depart-

¹ *Mayors' Inaugurals*, ii, p. 382 (1866); *Ibid.*, p. 406 (1867).

² *Mayor's Inaugural* (1899), p. 51.

³ *Mayors' Inaugurals*, ii, p. 412 (1867).

⁴ *Mayor's Inaugural* (1870), p. 51.

⁵ *City Documents*, no. 45 (1872), p. 6.

ment.¹ In its report of 1870 the board of consulting physicians had attributed the high death rate of 24 to 25 in a thousand to the lack of cleanliness in the city.² Toward the end of 1871 an unsuccessful attempt was made to pass an ordinance establishing an independent board.³

In his inaugural of 1872 Mayor Gaston urged the reconsideration of the defeated measure. Force was added to the movement by the neglect of the aldermen to deal effectively with a small pox epidemic later in the year. On December 2, 1872, an ordinance was secured, giving the mayor power to appoint with the approval of the city council three persons, not members of that body, to serve as a board of health. They were intrusted with all the duties of the aldermen relating to the health of the city except street cleaning and the collecting of ashes and offal. The board had power to appoint a superintendent of health, a city physician, and a port physician, subject to approval by the mayor.⁴

Library. The expenditure for the public library increased from \$24,756 in 1860 to \$145,452 in 1873. Down to 1870 the advance was slow. From that year onward, however, much larger expenditures were made. In 1870 the city established at East Boston its first branch library. The success of this experiment led in 1872 to the opening of a branch in South Boston, and in 1873 of others in Roxbury, Charlestown and Brighton.⁵ Moreover, it was found necessary to enlarge the main building.

In 1873 the city council passed an order requesting the trustees to keep the reading-room open during certain hours every Sunday. Similar orders, passed in 1865 and 1872, had been vetoed by the mayors. Mayor Pierce, however, was much in favor of the innovation, and it was carried out.⁶

Schools. The expenditure for schools increased from \$632,385 in 1860 to \$1,865,720 in 1873. From 14 per cent of the total city expenditures in the years 1854 to 1857 it advanced to 14.2 per

¹ *Memorial History*, iii, p. 279.

² *City Documents*, no. 43 (1870), p. 3.

³ *Mayor's Inaugural* (1872), p. 19.

⁴ *Memorial History*, iii, pp. 279, 280.

⁵ *Mayor's Inaugural* (1872), p. 26.

⁶ *Memorial History*, iii, pp. 283, 284.

cent in the years 1868 to 1871. Meanwhile the per capita charge had grown from \$2.39 to \$5.82. The chief causes of this great increase were the rapid growth in the number of pupils and larger payments for instruction and supplies made necessary by a rising price level.

The period opened with the very high expenditure of \$632,385, due to the building of an unusual number of schoolhouses. In his inaugural of 1861, Mayor Wightman remarked that "the rapid increase in the expenditures for our schools within the last few years, is, however, a subject of grave concern."¹ But when the improvements then in progress were completed, the expenditure for new schoolhouses fell in 1863 to only \$5,870. The total school expenditures in 1863 were \$471,343.²

By 1864, however, the construction of schoolhouses was again necessary and an increase in salaries could no longer be postponed. Expenditures moved upward to \$643,774 in that year and \$961,497 in 1867. The annexation of Roxbury and unprecedented activity in schoolhouse construction carried the expenditure to \$1,329,287 in 1868 and to \$1,602,750 in 1869. Then, after a decline in 1870 and 1871 expenditures rose to \$1,865,720 in 1873.

A factor which contributed considerably to the growth of school expenditure during this period was the rise in individual salaries. The advance in pay accorded other employees of the city in 1863 brought forth a petition from the teachers for a similar increase in their salaries which had not been changed since 1857. The committee, to which this petition was referred, was loath to recommend granting the request, stating that "a reduction of prices is not to be effected by an increase of salaries and means of expenditure, but by a persistent and patriotic determination to purchase and expend with economy, thereby reducing demand for consumption."³ It concluded this exhortation, however, by recommending an increase in the pay of teachers in the lower grades. The advance, which began with the lower salaries soon

¹ *Mayors' Inaugurals*, ii, p. 230 (1861).

² A detailed statement of school expenditures will be found on p. 365 of the Appendix.

³ *City Documents*, no. 105 (1863), p. 7.

became general, continuing until 1867. The following table gives the salaries of the principal grades during the most important years of increase, the figures being the maximum pay received.

	1863	1865	1866	1867
Headmaster, High	\$2,800	\$3,500	\$4,000	\$4,000
Submaster, "	2,000	2,500	2,800	3,000
Ushers, "	1,600	2,000	2,200	2,200
Masters, Grammar	2,000	2,500	2,800	3,000
Submasters, "	1,600	2,000	2,200	2,200
Ushers, "	1,000	1,500	1,600	1,600
Primary	450	600	650	650
Total	\$11,450	\$14,600	\$16,250	\$16,650

The average increase from 1863 to 1867 was 45 per cent. The only important changes during the remainder of the period were the increase in the salaries of the submasters and ushers in the grammar schools to \$2,600 and \$2,000, respectively, and the rise in the pay of the primary teachers to \$800. The growth in the amount paid to instructors after 1867 was largely due to increase in their number.

The expenditure for new schoolhouses reached its highest figure after 1867, rising from \$188,790 in that year to \$612,337 in 1869. The need for new accommodations was the result not only of the growth in population but also of the shifting of residence sections. The movement of population away from the center of the city left Boston with a number of useless schoolhouses, and, at the same time, required provision for the pupils elsewhere.¹ In his inaugural of 1871 Mayor Gaston urged a halt in this expenditure, remarking that "there are limits to expenditures for even the best of objects" and suggesting that "during the present year all demands for extra outlays be carefully scrutinized."² The Mayor's recommendation was followed that year, only \$99,300 being spent. In 1872 Mayor Gaston intimated that in the construction of schoolhouses the city had "in some instances, exceeded in size the limit best adapted to economy, efficiency and convenience."³ The following year Mayor Pierce

¹ *City Documents*, no. 83 (1870), p. 4.

² *Mayor's Inaugural* (1871), p. 15. ³ *Ibid.* (1872), p. 22.

suggested the wisdom of hiring accommodations in districts where the increase in school population was not great, rather than "erecting large and costly structures while building materials and labor command the present high prices."¹ Despite these suggestions, the amount expended for schoolhouses averaged \$451,193 in the years 1872 and 1873.

Expenditure was somewhat increased by the taking on of new branches of education. In November, 1868, the first evening schools were established, an experiment successful from the start.² The first free public school for deaf mutes in this country was started in Boston in 1869.³

Water. The cost of supplying water amounted to 13 per cent of the total expenditures in the years 1854 to 1857 and 15 per cent in the period 1868 to 1871. In the latter period the per capita burden was \$6.17, as against \$2.19 for the former. The rapid increase from \$404,970 in 1860 to \$1,398,702 in 1873 was due to the necessity of enlarging the supply and also to the extension of the system into the annexed territories.

In 1860 the lake and aqueduct were being used to their utmost capacity. By raising the dam, however, the city was able to put off for a few years the necessity of obtaining a supply from other sources.⁴ At this time New York, with a population four times that of Boston, was using but one-third more water.⁵ A more economical use of the Cochituate supply was made possible by the construction in the years 1865 to 1871 of a large reservoir at Chestnut Hill. The cost of this great work, exclusive of the beautiful driveway around its shores, was \$2,450,000, far exceeding the estimate of \$900,000 made by the board.⁶

Expenditure for water reached its height in 1868, at \$1,788,015. It was prevented from falling back to its old level, after the Chestnut Hill work was completed, by the necessity of introducing water into Roxbury and Dorchester. From 1868 until 1873

¹ *Mayor's Inaugural* (1873), p. 24.

² *City Documents*, no. 52 (1869), p. 4.

³ *Ibid.*, no. 9 (1870).

⁴ *City Documents*, no. 9 (1862).

⁵ *Mayors' Inaugurals*, ii, p. 247 (1862).

⁶ *City Documents*, no. 85 (1865).

about \$1,500,000 was expended in supplying these communities. City water had been their chief motive for annexation.¹

The introduction of meters in manufacturing establishments and the employment of inspectors to detect waste resulted in the reduction of the amount used to a more reasonable figure.² Even then the board believed that one-third of the water brought into the city was wasted.³ Before the Chestnut Hill work was completed, Boston was seeking a greater supply. After January 1, 1870, water for East Boston and Deer Island was obtained from the Mystic reservoir under contract made with the water board of Charlestown.⁴ In 1871 engineers appointed to make a study of the available sources within fifty miles of Boston reported in favor of Sudbury River. The next year an act was obtained, giving the city authority to take the waters of this river and Farm Pond.⁵ A temporary connection was made with Lake Cochituate, by which during the summer of 1872 the city was able to obtain an adequate supply. This arrangement could not be made permanent, however, without injury to mill owners on the river, requiring the payment of very heavy damages.

By the annexation of Charlestown in January, 1874, the city came into possession of the Mystic waterworks. This system was capable of supplying a large amount of water, and was productive of income sufficient to pay not only the cost of maintenance but also to yield a handsome surplus toward the reduction of the debt of \$1,403,000 on the works.⁶ The possession of the water privileges enjoyed by Charlestown in the Mystic Lake had been a great inducement for the annexation of that city.⁷

County of Suffolk. The expenditures of the County of Suffolk did not keep pace with the general rise in city expenditures. After constituting 6.9 per cent of the total expenditures in the period 1854 to 1857 they fell to only 2.6 per cent in the years

¹ *Reports in Relation to Annexation of Roxbury*, City Council, 1867.

² *Mayors' Inaugurals*, ii, p. 335 (1865).

³ *Ibid.*, p. 424 (1867).

⁴ *Mayor's Inaugural* (1870), pp. 38, 39.

⁵ *Acts*, 1872, ch. 177.

⁶ *Auditor's Report* (1873), p. 14.

⁷ *City Documents*, no. 105 (1873), pp. 20, 21.

1868 to 1871. Even the per capita figure decreased from \$1.16 to \$1.08.

At the end of the last period Boston was very much disturbed at being required to pay for certain highways in Chelsea, North Chelsea, and Winthrop, laid out by the county commissioners of Middlesex. A committee appointed by the city council to confer with the authorities of these towns was able to secure their consent to a petition to the legislature for relief.¹ No action was taken by the General Court at this time, however. In 1871 the demands of the county commissioners of Middlesex for a large payment again incited the city to apply for relief. This time it was granted, chapter 91 of 1872 providing that in the future no part of any expenditure for streets or bridges in the city of Chelsea or the towns of North Chelsea and Winthrop should fall upon the County of Suffolk or the City of Boston.²

Beginning with the financial year 1866-67 the city secured somewhat greater control of the county expenditures. All the accounts of the jail and police court, up to that time audited and allowed by a board of accounts consisting of the judge of probate of Suffolk County and the police court justices, were henceforth to be passed upon by the aldermen.³ The effect of this change is seen in the increase of the "mayor's drafts" from one-quarter of the total county payments to almost one-half.

Miscellaneous. In the years 1862 to 1866 the city spent for purposes of recruiting troops, soldiers' relief, and other expenditures incident to the War \$3,500,000. Of this amount the sum of \$1,100,000 was reimbursed by the state, making the net cost of the War to the city \$2,400,000 at the end of 1865.

The call for volunteers found no adequate legislative provision in force for equipping the regiments. Public and private contributions had to be relied upon; the city council in this emergency appropriated \$100,000 in aid of the volunteers belonging to Boston. A depot for supplies was opened in a building on Tremont Street, tendered free by William Evans, the owner. The city

¹ *Mayors' Inaugurals*, ii, p. 235 (1861).

² *City Documents*, no. 127 (1873), pp. 4, 5.

³ *Auditor's Report* (1865), p. 8.

council appointed a committee to take charge of the building, and the donation department was organized by Mrs. Harrison Gray Otis.¹

On July 1, 1862, President Lincoln called for 300,000 volunteers. In filling its quota, the city was forced to pay a bounty of \$100. This was no sooner filled than the second requisition for 300,000 was made on August 4th. Boston started in by offering a \$100 bounty, but only avoided a draft by raising the inducement to \$200.² The total amount paid out in bounties during this year was \$922,885.³ The War expenditure of 1861 and 1862 was illegal and in many cases extravagant, but such was the patriotism of the people that they never questioned these payments. The payment of bounties out of money raised by taxation might have been stopped on petition of ten taxpayers to the supreme court.⁴

In 1863 the payment of bounties by towns and cities was forbidden, and a state bounty of \$50 provided for.⁵ Legislation also authorized the repayment to the towns and cities of the money expended in bounties.⁶

RECEIPTS

The extraordinary rise in the expenditures of Boston from \$3,500,546 in 1860 to \$17,812,874 in 1873 demanded a rapid increase in her receipts. The receipts of the city, exclusive of loans, advanced from \$3,439,236 in the first year of the period to \$12,391,869 in the last. Part of this increase was obtained from such branches as special assessments, sales of property, the institutions, and the water department. Ferry tolls opened an entirely new source. The greater part of the advance was met, however, from taxation.

Taxes. In the period 1860 to 1873 receipts from taxation increased from \$2,479,519 to \$9,218,020. The tax rate in the meantime had moved with many fluctuations to a higher level. From 69 per cent of the total city receipts in the period 1854 to 1857 taxes rose to 76 per cent in the years 1868 to 1871.

¹ *Mayors' Inaugurals*, ii, pp. 242-244 (1862). ⁴ *Memorial History*, iii, p. 268.

² *City Documents*, no. 86 (1862).

⁵ *Ibid.*

³ *Auditor's Report* (1862), p. 143.

⁶ *City Documents*, no. 55 (1863).

In 1860, the tax rate, which in 1859 had reached \$9.70, the record figure before the War, was lowered to \$9.30, bringing in \$2,479,519.¹ The valuation had increased, however, from \$263,429,000 in 1859 to \$276,861,000 in 1860. In 1861 a still lower rate, \$8.90, accompanied by a slight decline in the amount of assessable property, caused a falling off in the tax receipts to \$2,382,102. Business was depressed, and the War opening, circumstances which caused the city to retrench in all ordinary activities. The sudden rise of the tax rate to \$10.50 in 1862, valuation still remaining stationary, brought in \$2,889,938. In 1863 the rate was raised to \$11.50. Valuation, partly in response to rising prices, increased from \$276,217,000 in 1862 to \$302,507,000 in 1863, the greater part of the advance being in personal property. The product of the tax levy of 1863 was about \$500,000 greater than that of 1862, being \$3,398,397.

In 1864 the tax rate was fixed at \$13.30, producing on a valuation about \$30,000,000 greater a revenue of \$4,487,609. The next year the rate reached \$15.80, the highest figure during the period. This, levied upon property assessed at \$371,892,000, or about \$39,000,000 higher than the valuation of the previous year, brought in \$6,098,150 in tax receipts. In two years the amount raised from taxation had almost doubled, the taxpayers responding cheerfully to these extraordinary demands. In his inaugural of 1865 Mayor Lincoln stated that the taxes had been met during the trying times as well as ever before.² The following figures, showing the percentage of taxes collected to December first in each of the years 1860 to 1867, bear out this statement: 1860, 46; 1861, 47; 1862, 51; 1863, 52; 1864, 50; 1865, 54; 1866, 55; 1867, 50.³

At the beginning of 1866 Mayor Lincoln looked for a reduction in expenditure with the coming of peace.⁴ As the receipts of the city were then bringing in a large surplus, and, as business was depressed, it was thought best to lower the rate to \$13.00. The

¹ The figures given in this section include receipts from poll, corporation and bank taxes, as well as general property.

² *Mayors' Inaugurals*, ii, p. 330 (1865).

³ *Mayor's Inaugural* (1886), p. 26.

⁴ *Mayors' Inaugurals*, ii, p. 381 (1866).

continued rise of assessable property gave tax receipts of \$5,741,370, only about \$300,000 less than those of 1865. The halt in expenditures did not outlast 1866, and in 1867 the city found itself committed to the succession of great improvements which occupied the rest of the period. The city council chose to meet this advance as in the War period by raising the tax rate. This was set at \$15.50 in 1867, \$7,145,651 being collected.

This high rate, in a year of "unusual and extreme depression of trade," brought forth a storm of protests.¹ Such heavy local taxation, added to that imposed by the federal government, was undoubtedly very burdensome. The percentage of assessable property abated rose from 1.27 in 1866 to 1.42 in 1867,² and the proportion of taxes collected by December first fell from 55 per cent to 50 per cent.

The city council gave way to the demands for a lower tax rate, placing it at \$12.30 in 1868. The receipts were \$6,473,645, about \$700,000 less than those for 1867. The rise in valuation this year was partly due to the annexation of Roxbury, which added \$26,000,000 in taxable property. The following year Dorchester added \$15,000,000. The valuation of 1867 was increased about \$700,000 by the removal of a difficulty which had caused the city considerable annoyance and some loss. In the sale of its Back Bay lands the commonwealth had given the purchaser the option of taking either a deed or a three-year bond for a deed. In the latter case the title remained with the state, thus preventing taxation by the city. In some cases purchasers had found pretexts for delaying the taking of a title as much as three years after the expiration of the bond. Finally, in 1867, chapter 101 was secured, permitting taxation in any event three years after purchase.³

In 1869 the tax rate again moved upward — to \$13.70, yielding \$7,696,532. The next year it reached \$15.30, bringing in \$9,106,481. In 1871, 1872, and 1873 the rate was fixed at a lower figure, \$13.10, \$11.70 and \$12.80, respectively. Since the early fifties

¹ *City Documents*, no. 130 (1867), p. 6.

² *Mayor's Inaugural* (1868), p. 18.

³ *Ibid.*

the tax rate had been subject to rapid fluctuations, a condition in great contrast to the gradual movement previous to that time.

In the following table will be found the amounts, in millions, of both real and personal property from 1862 to 1873 with the percentage which each constituted of the total assessment.

Year	Real	%	Personal	%	Total
1862	\$163	59	\$112	41	\$276
1863	169	55.9	132	44.1	302
1864	182	54.8	150	45.2	332
1865	201	54	170	46	371
1866	225	54.2	189	45.8	415
1867	250	56.3	194	43.7	444
1868	287	58.2	205	41.8	493
1869	332	60.4	217	39.6	549
1870	365	62.5	218	37.5	584
1871	395	64.5	217	35.5	612
1872	443	65.1	239	34.9	682
1873	470	67.8	223	32.2	693

The total valuation began to respond in 1863 to the change in price levels. When once started upwards, it continued without a halt from \$276,000,000 in 1862 to \$693,000,000 in 1873, an increase of 151 per cent. The advance was due in part to the inflation of the currency, but to a greater extent, especially in the latter years of the period, to the growth of the city.

Without a wide-awake board of assessors it is unlikely that the valuation would have been pushed up so rapidly. In 1865 Mr. Thomas Hills became one of the principal assessors, and from 1866 to 1892 served as chairman of the board. To his zeal in getting hold of taxable property, this increase in valuation is in part due. He was a student of taxation as well as an administrator. The report of the auditor for 1870 contains a discussion by Mr. Hills, written in May, 1871, of the report of the New York Tax Commission of 1870. This commission had recommended the abolition of the tax on personal property and the imposition of a tax on rentals in its place. The commission believed that, since the personal property tax was so generally evaded, so fruitful of perjury, and so hard upon those of little means, it would be better to abolish it. Their proposed tax on rentals was based on the theory that the amount a person paid for

rent was a fair index of his means.¹ Mr. Hills held the opinion, however, that it would be unfair to exempt personal property, and believed that in Boston but little personalty escaped.

It will be noticed that personal property was the first to respond to the influence of inflation. In 1862 this made up 41 per cent of the total assessable wealth. From 1862 to 1866 the valuation of personal property advanced from \$112,579,000 to \$189,595,000, or almost \$20,000,000 a year. Real estate responded but slowly. As a result, personalty advanced to 46 per cent of the total valuation in 1865. At this point, however, it was overtaken by realty. Whereas real property more than doubled in valuation from 1866 to 1873, personal property increased very little; from 1869 to 1871 it was stationary. From 45.8 per cent of the total assessable property in 1866 personalty fell steadily to only 32.2 per cent in 1873.

The rise in the valuation of real estate was aided by speculation in land. The rapid growth of the city offered possibilities to the shrewd investor, and the assessors took advantage of these speculative prices to raise valuations, thereby causing no little complaint.² With the panic of 1873, the movement came to an end.

The relative decline in the valuation of personalty was due not only to the speculative movement in realty but also to another cause. It is impossible to believe that in the great prosperity preceding 1873 the amount of personal property in Boston did not increase. We must attribute its failure to advance in the assessment to its escape from taxation, which was stimulated by the remarkable advance in tax rates during this period. The flight of personalty was delayed until after the War, because of patriotism and the belief that such high rates would not be permanent.

A large part of the increase in the tax rate during the first part of the period was due to the tremendous growth of the state tax. From 1860 to 1868 the expenditures of the state increased from

¹ A similar recommendation was made by the Massachusetts Tax Commission of 1897.

² *Mayor's Inaugural* (1870), pp. 27, 28.

\$1,193,000 to \$5,159,000.¹ The debt rose in the meantime from \$2,000,000 to \$21,000,000.² In 1860 and 1861 the requisitions upon Boston were for only \$82,245 and \$94,575, respectively. These payments added only \$0.31 and \$0.35 to the tax rate. The \$578,270 demanded in 1862 represented \$2.09 of the total tax rate of \$10.50. By 1865 the city's share of the state tax had risen to \$1,592,501, or \$4.44 of the tax rate of \$15.80. The greatest demand came in 1867, when the state called for \$1,694,150; owing to the growth in valuation this represented but \$3.94 of the tax rate. The end of the War did not bring back the old level of state expenditures. Aside from the charges due to the War, expenditures had increased in all branches of state activity,³ and the state tax could not be greatly reduced. During the years 1868 to 1873 the requisition upon Boston varied from about \$700,000 to \$900,000. In 1873 it constituted \$1.23 of the total tax rate. The proportion of the state tax borne by Boston increased from 31.5 per cent in 1861⁴ to 33.8 per cent in 1865;⁵ the annexations of Roxbury and Dorchester carried it to 36.8 per cent in 1873.⁶

The poll tax was placed at \$1.50 in 1860 and 1861. In 1862, it was advanced to \$2.00, and was maintained at that figure thereafter. The cause of this increase is found in the provisions of chapter 158 of 1862. Under the old law one-sixth of the taxes must be levied upon polls. With the advent of the War, this provision would have required a very excessive poll tax. The legislature of 1862 realized the injustice of such a tax, and limited the aggregate poll tax for all purposes, state as well as local, to \$2.00. Highway taxes, when separately assessed, were exempted.⁷ This period saw a marked increase in the number of rateable polls, especially after annexation began. They rose from 34,449 in 1860 to 70,199 in 1873. Even in this period, it was

¹ Bullock, *Finances of Massachusetts*, p. 63.

² *Ibid.*, p. 61.

³ *Ibid.*, p. 63.

⁴ *Acts*, 1861, ch. 110.

⁵ *Ibid.*, 1865, ch. 181.

⁶ *Auditor's Report* (1873), p. 151.

⁷ Bullock, *Finances of Massachusetts*, p. 92.

impossible to collect a large percentage of the poll tax assessments. Of the assessments made in 1870, but 54 per cent had been collected by 1874.¹

In this period the tax system was enlarged by the addition of the corporation tax and the national bank tax. The first receipts from the corporation tax appear in 1864, being \$391,616, or about one-twelfth of the total tax receipts. In 1869 the receipts from this tax rose to \$453,035; in 1873, the panic year, they fell to \$346,995, being about one-twenty-fifth of the total tax receipts. The receipts from the bank tax begin in 1871. The amounts received from this source were \$271,193 in 1871, \$256,014 in 1872, and \$205,156 in 1873. In 1873 the bank tax contributed one-fiftieth of the total tax receipts.

The corporation tax was established by chapter 208 of 1864. As recast by chapter 283 of the acts of 1865, it provided that Massachusetts corporations should pay a franchise tax upon what has come to be known as their "corporate excess." Since the enactment of chapter 158 of 1832 it had been the practice to assess the real estate and machinery of manufacturing corporations locally. The shares were then taxed as personal property at the residence of their holders with a deduction for real estate and machinery. Though corporations were required to report to the assessors of each locality the names and holdings of stockholders, the shares had largely escaped taxation.

The new law applied to all domestic corporations, and provided that real estate and machinery were to be taxed locally, as formerly. A tax commissioner was appointed, who was to assess annually the true value of the capital stock. After deducting the value of the real estate and machinery, he was to tax the remainder at the average rate on property in the state. As this tax was to be paid directly by the corporation to the state, evasion would be no longer possible. The receipts from the corporation tax were to be divided between the towns and the state, the towns receiving that part of the tax paid on account of shares held by their inhabitants and the state retaining that part paid on account of shares held outside the commonwealth. The

¹ *Report of Commissioners on Taxation and Exemption* (1875), p. 73.

shares of Massachusetts corporations were then exempted from further taxation.¹ In 1873 Boston received about 35 per cent of the corporation tax receipts distributed among the towns.² The loss to the assessors' lists by the exemption of these shares was undoubtedly small in comparison with the amount derived from this more certain method of taxation.

National bank shares were taxed until 1871 like other personal property and with as little success. Assessors were required to find out the names of stockholders in banks located in their own towns and to convey the information to the assessors in the towns where these stockholders resided. Such methods were ineffectual, however. In 1868 an advance was made by requiring that shares held by residents of other states should be taxed locally and the proceeds turned over to the state treasury. Finally, in 1871, chapter 390 provided that all shares were to be taxed locally at the local rate upon their fair cash value, after deducting the value of real estate owned by the bank. That part collected on account of shares held by residents of other towns was to go to those towns and that part collected on account of shareholders residing outside Massachusetts was to go to the state.

The effectiveness of the tax led to great opposition from the banks, and in 1872 a return to essentially the old system was made under chapter 321. In 1873, however, the state under the provisions of chapter 315 practically reestablished the system of 1871.³ The act of 1871 had provided, however, that the tax should be collected from the several owners. As only a few of the banks assumed the payment of the tax, the difficulties of administration were considerable.⁴ The act of 1873 removed this defect by imposing upon the banks the duty of paying the tax in a lump sum for their various stockholders.

Chapter 121 of 1865 established an indirect penalty for taxpayers, who failed to return lists of their personal property. Henceforth, abatements were to be allowed only in case the

¹ Bullock, *Finances of Massachusetts*, pp. 66, 67.

² *House Documents*, no. 125 (1874).

³ Bullock, *Finances of Massachusetts*, pp. 82-85.

⁴ *House Documents*, no. 175 (1872), p. 10.

valuation exceeded by more than 50 per cent the amount which would have been assessed if the list had been brought in on time and the abatement was to be only this excess above 50 per cent. Thus, if property worth \$10,000 had been assessed for \$20,000, the owner could only have the assessment reduced to \$15,000.

Considerable dissatisfaction was felt with the work of the assistant assessors. It was thought by many that the practice of annual election by the city council led to the choice of incompetent officials. In 1874 Mayor Cobb advised complete reorganization of the department, referring to the method of selection as "loose and irresponsible."¹

Rents. The receipts from the rent of city property continued to decline in relative importance, though they increased absolutely. In the years 1868 to 1871 rents contributed but 1.2 per cent to the total receipts of the city. The advance in the receipts of this branch from \$88,774 in 1860 to \$130,922 in 1870 was largely due to the rise in individual rents, especially those of the markets. The rapid rise from \$134,027 in 1872 to \$190,710 in 1873 was due also to the acquirement of wharf property and to the temporary ownership of real estate taken during the progress of the great street and land improvements.

Apparently, the city was somewhat behind private owners in taking advantage of the increase in real estate values. At the beginning of 1866 Mayor Lincoln called attention to the fact that the old State House yielded the same return in 1865 as in 1860.² At his suggestion the rents of this property were increased from \$11,000 to \$18,000.

Interest. Though the amount derived from interest rose from \$70,128 in 1860 to \$238,751 in 1873, it declined in relative importance from 2 per cent of the total receipts in the years 1854 to 1857 to 1.5 per cent in the period 1868 to 1871. The securities held by the city rose as high as \$1,200,000 during the street and land improvements in the early seventies, contributing about \$60,000 to the interest account. The record receipts of \$272,703 in 1862 was largely due to \$216,000 premium obtained in the sale of city stock.

¹ *Mayor's Inaugural* (1874), p. 31. ² *Mayors' Inaugurals*, ii, p. 388 (1866).

The \$238,751 received in 1873 was made up of interest payments of approximately \$60,000 on bonds and mortgages, \$49,000 on deposits in the banks, \$80,000 on delinquent taxes, \$15,000 on betterments, and \$34,000 from other sources. The extraordinary amount obtained in that year from interest on delinquent taxes records the hardships of the Great Fire of 1872. It was also due to the low rate of interest charged by the city, which had lately made it profitable to delay payment, using the money to better advantage elsewhere. This opportunity for profit at the expense of the city was taken away in 1873 by legislation allowing a charge of 12 per cent on delinquent tax bills. Up to this time the city had exacted only 6 per cent.¹

*Licenses.*² In the period 1868 to 1871 licenses yielded but 0.1 per cent of the receipts of the city. During the War, the receipts fell to only \$4,747 in 1862. After 1865, however, higher charges in some instances, accompanied by a growth in the volume of business, caused a rise to \$20,636 in 1873. The chief sources of license receipts during this period were licenses on dogs, public carriages, peddlers and intelligence offices, and the charges for recording mortgages on personal property and for marriage certificates. In 1867 the raising of the fee for dog licenses brought in much larger receipts.

Liquor Licenses. In 1868 Massachusetts departed for a single year from the policy of prohibition followed since 1852, by allowing the granting of liquor licenses.³ The law of 1852 had caused much dissatisfaction in Boston, where the police were powerless to prevent illicit sales. Conviction could be secured in only a few of the many cases brought before the courts. Consequently, the reports of the chief of police and the inaugural addresses contained demands for a return to the old license system. In 1862 Mayor Wightman said that "to insist upon a law remaining upon the statute book which is absurd in its provisions, is disregarded by its own agents, — and is not pretended to be enforced in our courts, — refusing all legislation by which it may be regulated, is

¹ *Auditor's Report* (1872), p. 20.

² This branch of income does not include receipts from liquor licenses.

³ Bullock, *Finances of Massachusetts*, p. 88.

unworthy of the intelligence of a Massachusetts Legislature."¹ The attempted enforcement of the law by the newly organized state police force in the last year of the period caused much hard feeling in Boston.²

The net receipts from licenses in 1868 amounted to \$115,505, after the city had paid over to the state treasury one-half of the proceeds. This brief experiment gave Boston an opportunity to test the productiveness of a heavy license charge.

Special Assessments. From 1 per cent of the total receipts of the city in the years 1854 to 1857 the receipts from special assessments rose to 3 per cent in the period 1868 to 1871. The chief cause of this great increase was the passage of chapter 174 of 1866. Previous to the enactment of this law assessments could be levied only for the laying of sidewalks, the grading of unaccepted streets, and the payment of three-quarters of the cost of sewer construction.

The law of 1866, modified by chapter 276 of 1868, permitted the assessment of a proportionate share of the cost of the improvement up to one-half of the special benefit conferred. Receipts from special assessments were also obtained under the act authorizing the reduction of Fort Hill. These assessments, commonly known as "betterments," together with the charges for sewer and sidewalk construction, contributed to the receipts from special assessments during the period. In 1872 chapter 303 reduced the assessment upon sidewalks from the whole to one-half the cost.

The relative importance of these three forms of assessment will be seen by reference to the table on the next page, which gives the amounts assessed from 1867 to 1873.³

In the seven years following the law of 1866 Boston made use of the betterment provision to the extent of \$3,042,807. The addition of sewer and sidewalk assessments brought the total to \$3,533,657. Not all the amount assessed was collected, considerable abatement being allowed in some cases, and some money

¹ *Mayors' Inaugurals*, ii, p. 257 (1862).

² *Mayor's Inaugural* (1874), pp. 27, 28.

³ *Auditor's Report* (1873), p. 290.

Year	Sewers	Sidewalks	Betterments	Total
1867	\$17,917	\$6,134	\$54,206	\$78,257
1868	18,040	19,056	210,289	247,385
1869	41,417	15,584	765,258	822,259
1870	52,300	29,920	1,330,705	1,412,925
1871	59,706	17,608	159,400	236,714
1872	63,653	....	344,357	408,010
1873	109,301	40,214	178,592	328,107
Total	\$362,334	\$128,516	\$3,042,807	\$3,533,657

being lost by reason of the difficulty of collection. Boston had never been able to collect more than a part of her special assessments. In 1867 a committee referred to the annual loss of a considerable amount of money in this branch of receipts, remarking that it was common knowledge that these charges "were hardly expected to be paid; and that the Board of Aldermen went through the form of assessing them merely to comply with the letter of the Statutes." The committee recommended the appointment of extra clerks to hasten the process of collection.¹ The assessments were thereafter more rigorously collected. Of the \$3,533,657 assessed for all purposes during the period, \$2,100,000 had been collected by the end of 1873.

If we add to the \$3,000,000 assessed for betterments within the period \$1,500,000 more for work completed by 1873 but not assessed until later, we have a total of \$4,500,000 to place against the sum of \$23,000,000 expended for improvements during the last seven years of the period. Though only one-fifth of this expenditure, the return from betterments was a great help to the taxpayer.

Health. The receipts derived from the operations of the health department increased from \$14,908 in 1860 to \$31,218 in 1873. In relative importance, this branch declined from 1 per cent of the total receipts in the period 1854 to 1857 to 0.5 per cent in the years 1868 to 1871. In the latter period, it was one-seventh of the expenditure for public health. The rise in receipts after 1865 was chiefly due to greater receipts from the sale of ashes and the abatement of nuisances.

¹ *City Documents*, no. 117 (1867), p. 3.

Institutions. The remarkable rise in receipts from institutions after the loss sustained by the removal of the state paupers was chiefly due to the state payment for soldiers' relief and larger sales of the products of the houses of correction and industry. From \$31,108 in 1860 the receipts of the institutions advanced to \$222,789 in 1873. The highest point was reached at \$361,481 in 1865, when very large payments for soldiers' relief were made. From 2 per cent of the total receipts in the period 1854 to 1857 the receipts from institutions rose to 2.3 per cent in the years 1868 to 1871. At this time the receipts from the institutions amounted to 37 per cent of the expenditures.

The development of the chief sources of these receipts can readily be seen from the following table. The figures are in thousands of dollars.

Year	Correction	Industry	Overseers	Insane	Soldiers	Total ¹
1861	15	3	..	8	...	32
1862	11	4	2	10	61	91
1863	15	4	2	12	257	292
1864	16	7	6	14	310	359
1865	26	9	6	16	290	361
1866	44	9	11	15	164	268
1867	47	16	16	11	205	303
1868	62	18	17	8	145	265
1869	81	24	18	6	102	241
1870	75	25	15	5	99	235
1871	72	20	23	6	95	226
1872	73	19	24	3	87	218
1873	55	15	20	2	81	222

A serious attempt was made during the period to make the house of correction self-supporting. In 1859 the receipts of this establishment were about \$25,000. From 1860 to 1864, however, the receipts were very small, the directors being unable to secure a market for the product of the institution. The master of the house attributed the small receipts to the "present deplorable condition of our country."² In 1864 remunerative labor was found for the female prisoners. Sewing machines now enabled them to make over thirty cents a day, whereas in 1863 they had

¹ The figures for the total receipts include a small amount received from miscellaneous sources not given in the table.

² *Auditor's Report* (1860), p. 259.

earned less than five cents.¹ In 1867 the introduction of the manufacture of shoes brought the receipts to approximately \$62,000 in 1868 and \$81,000 in 1869.² From 1869 until 1872 the institution was practically self-supporting. The crisis of 1873 reduced the receipts to \$55,000.

The receipts of the house of industry and reformation record a similar development. The movement for the greater employment of its inmates, so many of whom were incapable of any remunerative activity, began at the close of the last period. In his inaugural of 1860 Mayor Lincoln referred especially to the "development of the agricultural resources of the Island."³ The receipts of this institution rose from only \$3,000 in 1861 to \$25,000 in 1870. Before its overcrowding, the insane hospital received a considerable amount from the board.

School Fund. The contribution from the Massachusetts school fund averaged in the years 1868 to 1871 \$9,194, a little less than 0.1 per cent of the total receipts of the city. After 1873 Boston ceased to receive anything from this source. Chapter 348 of the acts of 1874 confined the distribution to towns and cities with a valuation not exceeding ten million dollars.

Water. The receipts of the water department rose from \$372,290 in 1860 to \$1,118,598 in 1873. In the years 1868 to 1871 this branch made up 7 per cent of the total receipts of the city. Throughout this period a serious attempt was made to secure sufficient receipts to cover the annual maintenance charges. It was rendered ineffectual, however, by phenomenal waste in the use of water, which made necessary the almost continual enlargement of the plant.

The first year of the period saw a rise in receipts from \$353,465 to \$372,290. This was partly due to the introduction of meters, which had been installed in some of the large manufacturing establishments in 1859.⁴ The extension of the meter system in the next few years contributed to the rise to \$472,842 in 1865. Though the waste was somewhat reduced by the limited employ-

¹ *Auditor's Report* (1863), p. 255.

² *Mayor's Inaugural* (1868), p. 46.

³ *Mayors' Inaugurals*, ii, p. 207 (1860).

⁴ *City Documents*, no. 220 (1894), p. 150.

ment of meters and the maintenance of a system of inspection, it still continued very large. It was generally believed that the only certain remedy was the universal introduction of meters. The city council halted at a step which would have required the expenditure of a half million dollars.¹

Even at this time there was a movement for the reduction of water rates, which was strong enough to secure in 1865 the consideration of the city council. The vigorous protests of the water board prevented the lowering of the rates.² The board, moreover, pointed out so successfully the financial straits of the department that the rates for meters were raised, this increase accounting for the advance in receipts from \$472,842 in 1865 to \$530,526 in 1866.

The sudden rise in receipts from \$649,893 in 1869 to \$782,610 in 1870 was largely due to the passage of a very reasonable ordinance, allowing a credit to the water department for water used by other departments.³ It was hoped that this allowance would make the water works self-supporting. In his inaugural of 1870 Mayor Shurtleff stated that a million dollars had been lost to the water department by failure to charge for water thus supplied. He suggested in reparation the transfer of a like amount from the water to the city debt.⁴ The growth of the receipts to \$1,118,598 in the last year of the period was largely due to the increased use of water in the annexed territories.

In the table on the following page the receipts and expenditures of the water department have been placed side by side, showing how the continued demands for a larger plant, prevented the receipts from overtaking the expenditures. The figures are in thousands of dollars.

Ferries. On March 24, 1870, the city council established by ordinance a schedule of tolls for the municipal ferry, which reduced considerably the rates charged by the private company.⁵ Under these rates the receipts increased from \$180,058 in 1870 to

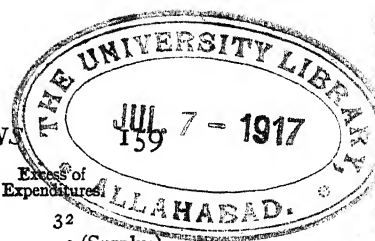
¹ *Auditor's Report* (1861), p. 284; *Mayors' Inaugurals*, ii, p. 335 (1865).

² *City Documents*, no. 76 (1865).

³ *Mayor's Inaugural* (1870), p. 40.

⁴ *Ibid.* (1870), pp. 40, 41.

⁵ *City Documents*, no. 96 (1870), p. 4.



1860-73]

IMPROVEMENTS AND ANNEXATIONS

Year	Expenditures	Receipts	Excess of Expenditures
1860	404	372	32
1861	378	380	2 (Surplus)
1862	413	400	13
1863	530	434	96
1864	765	463	302
1865	688	472	216
1866	873	530	343
1867	1,114	550	564
1868	1,788	609	1,179
1869	1,562	649	913
1870	1,596	782	814
1871	1,224	841	383
1872	1,160	902	258
1873	1,398	1,118	280

\$219,507 in 1873. In the following table the total expenditures, the ordinary expenditures, and the receipts are given, in thousands of dollars.

Year	Total Expenditures	Ordinary Expenditures	Receipts
1870	212	212	180
1871	255	204	184
1872	242	192	205
1873	297	209	219

The rates established by the city council were sufficient after the first two years to meet the ordinary expenditures, exclusive of the return on capital invested. From the very start, however, there was a strong movement for reduction of rates. In 1871 an order for the abolition of the tolls was defeated in the city council. In the same year the aldermen passed a measure, reducing the rates for foot passengers from two cents to one cent. This order was defeated in the common council.¹

Sales of Property. The sale of city property contributed 3.7 per cent to the total receipts of the city in the period 1868 to 1871. As in former periods, land sales were still the chief source of these extraordinary receipts. In the following table are given the amounts received from sales of property, and the sums derived from the sales of lands. The latter figures fluctuate more than the former, because they include payments in bonds as well as in cash. The figures are in thousands of dollars.

¹ *City Documents*, no. 220 (1894), p. 156.

Year	Sales of Property	Land Sales
1860	233	125
1861	93	43
1862	254	72
1863	70	102
1864	191	94
1865	100	195
1866	142	232
1867	198	139
1868	293	267
1869	343	464
1870	399	94
1871	453	232
1872	363	58
1873	346	65

The preceding period had closed with very large land sales. In the depression of the early sixties these fell off considerably, bringing in only \$43,000 in 1861. At this time the completion of the commonwealth lands in the Back Bay had glutted the market for building lots; and it was felt by the city government that some years must elapse before remunerative prices could be secured.¹ The expenditure of a million dollars for the South Bay filling had made certain a large loss even at the best of prices.

Throughout the period the policy of sale for settlement prevailed. The old idea of finding in the land receipts the means of paying off the debt had long since been given up. Mayor Lincoln expressed the current view in his inaugural of 1863. "It has been thought in the past," the Mayor said, "that our public lands would be a very productive source of wealth to the City; but experience has proved that we have been too sanguine in this respect. Beside the good policy which has been pursued in selling them at a low valuation, for the purpose of securing tax-paying proprietors, the laying out of streets, the grading, paving, lighting, and in some instances laying edge-stones, reduces the amount anticipated from the sale."²

In 1865 the sale of public lands again assumed large proportions, rising as high as \$464,000 in 1869. Better prices were obtained, as the demand for land increased after the War.³

¹ *City Documents*, no. 34 (1861), p. 8.

² *Mayors' Inaugurals*, ii, p. 283 (1863).

³ *Mayor's Inaugural* (1868), p. 23.

From 1865 to 1871, when the great movement stopped, \$1,623,000 was received from the sale of public land. The falling off in these receipts in the last two years of the period was due to a smaller demand and to the fact that the amount of salable land had been greatly reduced.

County of Suffolk. The receipts of the county were reduced by the act of 1860, which stopped the repayment of two-thirds of the cost of criminal prosecutions, giving in return the receipts from fines and costs. With the growth of the county and the consequent increase in court business the receipts increased from \$30,418 in 1861 to \$156,395 in 1873. The county receipts were only 1.1 per cent of the total in the years 1868 to 1871. The proportion of county expenditures met by receipts at this time was 44 per cent.

DEBT

This period saw an advance in the net debt from \$7,568,000 to \$27,719,000, the greater part of the increase being due to the tremendous improvements undertaken during the years 1867 to 1873. The per capita debt rose from about \$42.50 to \$100. The interest charge resulting from the city debt proper increased from \$161,000 in 1860 to \$1,756,000 in 1873; the interest on the water debt rose meanwhile from \$284,000 to \$522,000. In 1873 this combined charge added about 15 per cent to the city's expenditures, exclusive of the state tax.

The year 1859 had closed with a small reduction in the net debt of the city. In 1860 and 1861 a lower tax rate combined with diminished receipts from the sale of lands resulted in increases of \$387,000 and \$287,000, respectively. Of the \$1,700,000 borrowed during these two years, about \$220,000 was for the improvement of the public lands, \$424,000 for schoolhouses, \$75,000 for public grounds, \$160,000 for public buildings, \$680,000 for streets, and \$160,000 for the sudden demands of the War. Inasmuch as expenditures were stationary during these years, it would seem that the maintenance of a slightly higher tax rate would have made borrowing unnecessary. The fear of overburdening the taxpayer in a period of depression led to the lower rates.

In 1862, however, the addition of \$1,500,000 to the expenditures of the city as a result of the War justified the increase of \$1,086,000 in the net debt of the city, which at the end of the year stood at \$9,328,000. The city council made a very commendable attempt to meet a large part of these extraordinary demands from taxation. The tax rate was raised from \$8.90 in 1861 to \$10.50 in 1862, and even higher in the succeeding years. The high credit, which the city had always enjoyed, was maintained at this critical time by an expression in an order of the city council of its determination to pay both interest and principal in specie.¹

On February 24, 1862 Alderman Amory brought in a resolution for a petition to secure certain important amendments to the charter. One of these was a provision that not more than one per cent of the last preceding valuation should be assessed for municipal expenditures, and that the debt should not exceed 5 per cent of the same valuation.² Though nothing came of the Alderman's motion, it is important as foreshadowing the enactment of similar legislation years later.

The tax rate of 1863 was placed at \$11.50, and, although the expenditures were almost as heavy as in the preceding year, an increase of only \$457,000 in the net debt was found necessary. By 1864 the rise in prices had affected all city expenditures so that the total appropriations were over \$1,000,000 larger than in 1863. A large part of the increase was obtained by raising the rate of taxation, this time to \$13.30. The net debt rose only \$90,000. The city purchased \$50,000 water scrip, not due until 1867.³ In September, 1864, the committee on finance concluded that it would be less burdensome upon the taxpayers, if future loans should be made payable, both interest and principal, in currency. The city very carefully provided against misunderstanding by printing on the face of its issues the words "currency loan." These were to bear interest at 6 per cent, the gold loans previously obtained being for 5 per cent.⁴ The very

¹ *City Documents*, no. 102 (1862), p. 6.

² *Ibid.*, no. 18 (1862).

³ *Auditor's Report* (1864), p. 211.

⁴ *Mayors' Inaugurals*, ii, p. 327 (1865).

honorable policy pursued by the city during the War, when the cost of procuring gold raised her debt charges to an extraordinary figure, enhanced considerably the value of her bonds.¹ It gave special satisfaction abroad, where a large part of the debt was held.

In 1865 the receipts from the record tax rate of \$15.80 made possible the reduction of the debt by \$736,000. The next year \$559,000 was paid off, although the tax rate had been put down to \$13.00. The reduction during these two years was aided considerably by land sales amounting to \$427,000. At the end of 1866 the net debt stood at \$8,580,000, having been diminished \$1,295,000 in two years. The city council had taken advantage of the halt in expenditures to repay over one-half the money borrowed from 1860 to 1865.

At the end of 1866 the gross funded debt of \$12,998,000 was made up of the water debt of \$3,370,000 and the city debt proper of \$9,627,000. The latter owed its existence to the following objects: ferries, \$219,000; schoolhouses, \$1,114,000; public buildings, \$1,610,000; streets, \$1,590,000; land, \$1,088,000; War, \$1,947,000; parks, \$264,000; drainage, \$391,000; old debts, \$595,000; ordinary expenditure, \$660,000; and miscellaneous, \$146,000. Taking the years 1860 to 1866 as a whole, it would seem that the increase of one million dollars in the net debt was justified.

In his inaugural of 1867 Mayor Norcross urged the maintenance of a surplus sufficient to insure the ultimate extinction of the debt. He expressed satisfaction at the reduction of the federal debt, and thought that the citizens of Boston should take equal pride in the financial condition of the city. The Mayor pointed out that the city debt had increased in spite of the "sinking fund," and that the public lands had been almost all sold without accomplishing the desired reduction. He recommended that a surplus be obtained either by heavier taxation or by retrenchment.²

¹ The necessity of paying a premium for gold explains the rise in interest payments from \$173,549 in 1861 to \$345,796 in 1864.

² *Mayors' Inaugurals*, ii, p. 408 (1867).

The Mayor's advice was apparently accepted in part, for, although the city council of 1867 planned too many improvements to allow the creation of a surplus, it did meet most of the \$1,800,000 increase in expenditures from taxation. The tax rate of \$15.50 allowed an increase of only \$367,000 in the net debt of the city. The smallness of this increase is the more remarkable, when we find that Roxbury added \$991,000 to the debt in that year. During this year the water debt increased on account of the Chestnut Hill undertaking by \$500,000 — to \$3,867,000; its lowest point had been reached at \$2,942,000 in 1864.

The tax rate for 1868 was placed at \$12.30 in response to the great complaint against the high rate of the previous year. A great advance in valuation, due in part to the annexation of Roxbury, prevented a marked falling off in the receipts. The land sales of the year amounted to \$267,000. The city council, however, planned expenditures involving an increase of about \$1,500,000 over those of 1867, making necessary the addition of \$1,486,000 to the net debt of the city. The government of 1868 authorized loans amounting in all to over \$5,000,000. About \$3,300,000 were negotiated within the year, \$1,300,000 for the extension of the waterworks, \$300,000 for schoolhouses, \$1,200,000 for street improvements, and \$400,000 for improved drainage.

The year 1869 saw an increase of \$2,169,000 in the debt, \$213,000 being due to the annexation of Dorchester. Once more the tax rate was moved upward, this time to \$13.70, the land sales bringing in \$464,000. In this year a 5 per cent loan of £800,000 was taken by Baring Bros. & Co. of London at a price of 87 in gold. This loan was for the Fort Hill, Atlantic Avenue, Hanover Street, and Church Street improvements, and was named the "Consolidated Street Improvement Loan."

A true sinking fund, a new device for Boston, was created for the repayment of this debt. The scheme contemplated the investment of receipts, derived from special assessments and other payments in connection with these improvements, to be held as a separate fund for the annual purchase of a portion and the final extinction at maturity of the remainder of the debt.¹

¹ *Auditor's Report* (1869), pp. 16, 17.

The transition from the crude method of debt reduction to a pure sinking fund was gradual. From 1827 to 1870 certain specific receipts were annually credited to the committee on reduction, but kept in the general treasury balance. The plan did not contemplate the accumulation of a large balance or its investment. It looked rather to the annual employment of the funds in the repayment of the debt. The early committees had so timed the maturity of loans that purchase before the bonds became due was practically never necessary. After 1860 the greater magnitude and complexity of the loan operations made it impossible to use the funds at once for the repayment of the debt. The balances of the committee on reduction became much larger, as the following table shows. The figures are in thousands of dollars.

" SINKING FUND "

April 30, 1860-447	1864-1,204	1868-4,762
1861-546	1865-1,458	1869-6,339
1862-493	1866-2,748	1870-8,028
1863-876	1867-3,998	

After 1865 the committee on reduction secured interest on temporary loans made to the city treasurer. In 1867 the first investment was made, \$950,500 being placed in city of Boston 6 per cent currency bonds.¹ In 1869 the holdings in this stock had so increased as to yield \$267,000 in interest. From October, 1866, until January, 1868, the committee was able to provide the city treasurer with all the funds he required.²

The table on the next page, the figures being in thousands of dollars, shows the annual receipts of the "sinking fund" from 1860 to 1869.

The tax assignment for these ten years, taken as a whole, equalled the amount required by ordinance, though in some of the earlier years it was under the required figure. This was true of 1862, a very hard year for the finances of the city. In 1869 the "sinking fund" required almost 8 per cent of the tax receipts. The sale of city property brought in only \$1,314,000, less than one-eighth of the total receipts of the fund.

¹ *Auditor's Report* (1867), p. 9.

² *Mayor's Inaugural* (1868), p. 16.

Year	Tax	Cash Balance	Sales	Interest	Total
1860	220	263	205		688
1861	300	202	82		584
1862	200	227	249		676
1863	300	149	48		497
1864	300	151	84		535
1865	350	1,064	67		1,481
1866	360	1,101	101	26	1,588
1867	400	1,096	135	76	1,707
1868	417	1,067	174	231	1,889
1869	577	1,271	169	267	2,284
Total	3,424	6,591	1,314	600	11,929

At the end of 1869 a "sinking fund" of \$8,028,000 and bonds and notes of \$1,187,000 brought the total amount applicable to the reduction of the debt to \$9,215,000. This large sum, with "sinking fund" payments of \$2,000,000 a year, made the final extinction of a gross funded debt of \$18,687,000 seem only a matter of a few years.

Unfortunately, this excellent financial condition was too well understood by the city council. Of the \$2,284,000 paid to the "sinking fund" in 1869, \$1,848,000, or all except receipts from sales of property and interest, came from the taxpayer. This charge of over \$3.00 on a tax rate of \$13.70 seemed to many an unnecessary burden. In 1870 Alderman Talbot expressed the current opinion in these words: "This increase of our sinking fund beyond what I conceive to be a proper ratio to the debt to be paid from it, also increases our taxes at least two dollars on the thousand, and raises them above a point they never should reach."¹ It was found that the existing "sinking fund" with prospective additions and accumulations would meet at maturity the entire debt without recourse to the 3 per cent tax assignment.² The desire for a lower tax rate was, therefore, the chief motive for the passage of the ordinance of December 24, 1870, establishing a true sinking fund system. Previous ordinances of this kind had looked for an increase in the debt appropriation; this contemplated a decrease.

¹ *City Documents*, no. 83 (1870), p. 8.

² *Auditor's Report* (1870), p. 7.

In 1870, the last year under the crude "sinking fund," the tax rate was placed at \$15.30, this figure probably lending the final argument for a change. The net debt increased in this year to \$15,032,000, an advance of \$2,430,000.

The sinking fund system established in 1870 was carefully devised. The funds were to be managed by a board of commissioners, consisting of the mayor, who was to act as chairman, the city treasurer, the auditor, who was to serve as secretary, the chairman of the joint committee on accounts, the chairman of the committee on finance of the common council, and two members to be elected by the city council for two years from the citizens at large. The ordinance provided for the complete separation of the sinking funds from the general balance of the treasury.¹ The outstanding debt was divided into three parts, the water, the consolidated street improvement, and the general debt, each having its own funds. The ordinance gave the commissioners power to suspend taxation for the old debt, when in their opinion the sinking fund was sufficient with prospective accumulations to meet its payment at maturity.

Every future loan was to have a special sinking fund. Loans for public buildings and building sites were to run for ten years, and were to require the annual appropriation into the sinking fund of 6 per cent of their amount, those for the street improvements and the purchase of public lands, twenty years, with a 3 per cent requirement. The maturity of water loans was fixed at thirty years, the sinking fund demanding $1\frac{1}{2}$ per cent annually. The annual balance in the treasury was assigned to meet these requirements. The residue was to be raised by taxation, on the order of the commissioners. Any income earned by the funds was to be paid into them, as well as receipts arising from the employment of the loans, such as special assessments. The receipts from the sale of city property were also to be turned over to the commissioners. The ordinance stipulated that the commissioners were to invest the funds either in permanent or temporary loans of the city, or in the bonds of the state or federal government. Investments must bear at least 6 per cent interest.

¹ *Auditor's Report* (1870), pp. 7, 8 and pp. 197-199.

The bonds of the city thus acquired were not to be cancelled, but were to remain as part of the specific funds with which they were purchased. In the case of water loans it was provided that any surplus receipts from rates after payment of expenditures including interest upon the water debt should be turned into the sinking fund.¹

The new system contemplated the establishment for each loan of a specific fund, kept separate from the general balance in the treasury. It was intended that, through annual payments into these funds and their continual investment, the means for the amortisation of every debt should be provided at its maturity. In his inaugural of 1871 Mayor Gaston expressed satisfaction with the new device. "It would seem," the Mayor said, "that the new ordinance sufficiently protects the present bondholders of the city, and while it makes ample provision for the payment of future loans, taxation will be relieved and made more equal and satisfactory."² Though the system did provide for the eventual repayment of all loans, it never could ensure the practical extinction of the debt, without the determined stand of the government to meet all expenditures from taxes.

The board of commissioners on the sinking fund was organized on February 15, 1871. On February 27th the commissioners notified the city council, as had been expected, that there would be no taxation required on account of the outstanding debt of nearly \$24,000,000. For the sinking fund payments on loans authorized but not then negotiated, they called for a tax of only \$77,625.³

The city loans proper issued in 1870 amounted to \$7,322,000, and in 1871 to \$3,037,000. Practically all of these were for street and land improvements. In the latter year the tax was reduced to \$13.10, the city council no longer resting under the obligation to raise so large an amount for debt reduction. The net debt was increased in 1871 by \$944,000, rising to \$15,976,000.

In 1872 the tax rate was placed at \$11.70, the lowest figure since 1863. This year saw an increase in the net debt of \$1,938,000.

¹ *Auditor's Report* (1870), pp. 197-199.

² *Mayor's Inaugural* (1871), p. 12.

³ *Auditor's Report* (1870), p. 7.

Loans to the amount of \$2,834,000, exclusive of the water debt, were issued, schools and public buildings calling for almost \$1,000,000, and street improvements demanding \$1,755,000.

The rise in expenditures to \$18,641,000 the last year of the period brought a somewhat higher tax rate — \$12.80. In this very eventful year city loans proper amounted to \$8,129,000, over \$7,000,000 being for street improvements. The debt was also increased by the assumption of the Charlestown indebtedness of \$2,730,349, the Brighton debt of \$708,590, and the West Roxbury, of \$520,000, a total addition due to annexation of \$3,958,000.¹ The net debt reached \$27,719,000 at the end of 1873, an increase of \$9,805,000 for the year.

The Great Fire of November, 1872, was responsible for a considerable increase in the debt, the street improvements in the burnt area requiring an expenditure of over \$5,000,000. But for the interposition of the courts, the fire would have led to still greater borrowing. Among the acts passed by the special session of the legislature convened after the Fire was one authorizing the city to encourage rebuilding by loans not exceeding \$20,000,000 to owners of land in the burnt district. Three commissioners, William Gray, Otis Norcross and J. G. Abbott were appointed with authority to lend on first mortgages, and a loan of \$5,000,000 was authorized by the city council. A petition signed by ten legal voters, however, brought first, a temporary and, then, a perpetual injunction against such use of the public money, the supreme court holding the act unconstitutional.² Fortunately, private capital was able to rebuild within a year nearly the whole of the burnt area "without assistance from abroad and without apparent withdrawal of capital from active business."³

During the whole period and especially in the last two years the city borrowed considerable amounts for schoolhouses and other public buildings. In his inaugural of 1874 Mayor Cobb urged that these expenditures be met from taxes.⁴ In the following table will be found contrasted the objects for which the debts of

¹ *Auditor's Report* (1873), p. 12.

² *Ibid.* (1872), pp. 7, 8.

³ *Mayor's Inaugural* (1874), p. 9. ⁴ *Ibid.* (1874), p. 14.

1860 and 1873 were incurred. The figures, in thousands of dollars, are for the gross funded debt, exclusive of the water debt and the annexation debts.

	1860	1873
Streets	1,587	20,392
Schoolhouses.....	512	3,005
Old debts	716	595
Land	1,116	626
Ordinary expense	531	636
Public buildings	492	2,187
Parks	108	261
Ferries	250	317
War .....	...	1,911
Drainage .....	...	389
Miscellaneous	125	151
Total	5,439	30,475

The great increase was largely due to the tremendous street improvements. A considerable amount also resulted from loans for schoolhouses and public buildings. It was impossible that Boston should have undertaken vast land and street improvements without making great use of her credit. But the net debt of \$27,000,000 turned over to the next period seems a heavy burden, when we realize that succeeding years were likely to present their own great tasks.

FINANCIAL POLICY

The year 1859 closed with expenditures of \$3,578,071, inclusive of the state tax, and a net debt of \$7,568,000. A tax rate of \$9.70, the record figure before the War, had made possible a slight reduction in the debt. In 1860 the city council lowered the rate to \$9.30, keeping expenditures at practically the same amount as in the previous year. As a result, \$381,000 was added to the debt.

In 1861, and 1862 Joseph Milner Wightman was mayor. The existing business depression and the gathering war cloud brought retrenchment in practically all lines of city activity. In his inaugural of 1861 Mayor Wightman said to the city council, "I have no doubt that your judgment will accord with my own in forbearing, at this time, to present or recommend any new pro-

jects involving public expenditure, and the consequent taxation of our citizens. The necessary machinery of government must be kept in motion; and the works and measures connected with the public wants and improvements, already in progress, should be prosecuted with diligence and prudence.”¹ Expenditures were curtailed wherever possible and the city’s money saved for the more urgent demands of the Union. In spite of an expenditure of \$250,000 for War purposes, the economy practiced in 1861 resulted in a total expenditure of \$3,438,351, about \$150,000 less than the amount expended in 1860. The desire to spare the taxpayer led, however, to a reduction in the rate to \$8.90. The city was obliged to borrow, adding \$287,000 to its net debt. The policy of the War period is clearly stated in the following extract from a committee report. “In the early moments of dismay and discouragement, occasioned by our national calamity, we naturally directed every effort to military preparation. Our expenses were economized, our resources husbanded, and all public works of magnitude not already commenced were postponed to a more convenient season.”² Much of this War expenditure was incurred entirely upon the responsibility of the city, as no adequate legislation provided in the first year for the equipment of troops.

One-third of the expenditure of \$5,203,406 demanded in 1862 was due to the War. To meet this extraordinary expense, the tax rate was raised to \$10.50, and the net debt was increased by \$1,086,000, an addition amply justified. At the end of the fiscal year 1862 work was begun on a new city hall, almost the only extraordinary undertaking of the War period.

In 1863 Frederick Walker Lincoln was recalled to the head of the city government. He remained in office four successive years, managing the affairs of the municipality with marked ability. The policy of his administration was made evident in his first inaugural, when he remarked that “the times demand and our constituents have a right to insist, that their servants should pursue a most rigid economy in every department of the

¹ *Mayors' Inaugurals*, ii, p. 222 (1861).

² *City Documents*, no. 34 (1861), p. 16.

public service.”¹ Expenditures were cut down wherever possible. But for the necessity of paying more for supplies and labor, the expenditures for ordinary city activities would have been much less in 1863 than in 1862. The state tax levy of \$756,000 and the bounty tax of \$513,000 made the total expenditures for 1863 \$5,067,454. Only \$457,000 was added to the net debt, the tax rate of \$11.50 bringing in the greater part of the necessary receipts.

The continued rise in prices, together with the great cost of procuring gold for interest payments, raised expenditures to \$6,160,264 in 1864. Mayor Lincoln still held the city council to economy wherever possible.² The policy of meeting a large part of the expenditures from taxation was firmly adhered to, the tax rate being advanced again to \$13.30, and only \$90,000 was added to the debt. In 1865 the tax rate reached \$15.80, bringing in receipts sufficient to meet not only the expenditures of the year, which amounted to \$6,389,821, but to pay off \$736,000 on the net debt. The state tax amounted to \$1,592,501. Improvements were still put off until better times, the only exception being the much-needed Chestnut Hill Reservoir.

The need of enforced economy being past, expenditures rose to \$6,533,619 in 1866. Though the tax rate was lowered to \$13.00, a rapidly advancing valuation permitted a reduction of \$559,000 in the net debt. The debt of 1867 was \$8,580,000, only \$625,000 greater than that of 1861. The policy, which demanded retrenchment in city activities and met with liberal hand the requirements of the War, without adding to the debt, cannot be too highly commended.

Otis Norcross succeeded Mayor Lincoln, his term covering the single year 1867. He is to be remembered for the valuable service he rendered in holding in check the radical elements at a time when extravagance was sweeping over the whole country. In his inaugural of 1867 the Mayor firmly demanded either heavier taxation or a curtailment of expenditure.³ His stand restricted expenditure to the improvements most needed, keeping

¹ *Mayors' Inaugurals*, ii, p. 278 (1863).

² *Ibid.*, ii, p. 299 (1864).

³ *Ibid.*, ii, p. 409 (1867).

Boston from undertakings that fell within the province of private endeavor. Though expenditures increased to \$8,333,660, the Mayor secured a tax rate of \$15.50. Consequently, the debt advanced but \$367,000. Mayor Norcross understood well the great movement for the expenditure of public money which began in the War period, when the government became accustomed to hasty appropriations.¹

In 1868, 1869 and 1870, Dr. Nathaniel Bradstreet Shurtleff was mayor. The first year of his administration saw the annexation of Roxbury, the second, that of Dorchester. In spite of an advance in expenditures to \$9,716,337, the tax rate for 1868 was reduced to \$12.30. The increase in the net debt was \$1,486,000. The lower tax rate was the result of the great number of complaints of excessive taxation. Circumstances would have justified a higher rate. In 1869 the advance in expenditure to \$12,866,176 brought the rate to \$13.70, increasing the debt by \$2,169,000.

The city council of 1870 called a halt in the upward movement, restricting its activities to undertakings already commenced. Mayor Shurtleff in his inaugural recommended strict economy. He referred to the "costly and uncalled for luxuriousness," which had crept into municipal affairs in the past four years.² The council of 1870 made itself memorable by reducing the estimates \$2,000,000.³ It also raised the tax rate to \$15.30. The debt increased \$2,430,000. Up to 1870, a large amount was annually set aside for the use of the committee on reduction of the debt. It was plain that, as soon as the great improvements then under way were completed, the continuance of this policy would soon secure the practical amortisation of the debt. The adoption of a less severe sinking fund system was an answer to the popular demand for a lower tax rate. The tax rates for the three succeeding years were \$13.10, \$11.70 and \$12.80.

In 1871 and 1872 William Gaston was mayor. In his first inaugural he recommended economy, at the same time demanding

¹ *Mayors' Inaugurals*, ii, p. 407 (1867).

² *Mayor's Inaugural* (1870), p. 14.

³ *City Documents*, no. 121 (1870), pp. 6, 7.

the carrying out of all necessary improvements.¹ He looked with much concern on the per capita taxation of Boston, greater than that of any other city.² It is probable that the large expenditure of Boston at this time was due in part to extravagance. It is also true that a considerable portion was caused by the demand of the people for better services. A part was the result of conditions which the city government was not responsible for, such as the necessity of making street improvements without the right to levy adequate special assessments.

In 1871 expenditures fell slightly to \$12,416,917; but, with the low tax rate, \$944,000 was added to the debt. The next year the upward movement was continued, expenditures rising to \$14,924,920. The Great Fire was responsible for a part of this rise and still more for the advance in the last year of the period. The debt rose \$1,938,000 during 1872.

Henry Lillie Pierce was mayor in 1873, a year of tremendous problems. Besides the carrying on of many improvements already begun, it was necessary that the streets of the burnt area should be speedily straightened and widened. In his inaugural of 1873 he urged the city council not to sanction street improvements outside the burnt district.³ Expenditures mounted to the very high figure of \$18,641,414, a level not reached again until the last period. The debt advanced in this year \$9,805,000, part of this being due to the annexations of Charlestown, Brighton and West Roxbury.

As we review the policies of the various administrations, we are impressed with the fact that rigid adherence to the high tax rate maintained during the War would have considerably lessened the debt, and would probably have eliminated much extravagance. In the years following 1867, except for 1870, the rate was too low. A large part of the debt incurred during these years was, however, justified by the extraordinary character of the work accomplished. But for the sinking fund ordinance of 1870 the net debt of \$27,719,000 might have been completely extinguished in the succeeding period of rest.

¹ *Mayor's Inaugural* (1871), p. 1.

² *Ibid.* (1871), p. 7.

³ *Ibid.* (1873), p. 11.

CHAPTER V

THE BEGINNING OF THE PARK SYSTEM, 1874-1886

GOVERNMENT

IN this period the conviction gradually gained ground that the separation of executive and legislative functions must be absolute. The commission appointed on recommendation of Mayor Cobb to revise the city charter pointed out in 1875 with regard to the executive powers of the aldermen that "duties so numerous and important cannot be properly superintended and managed by persons who render gratuitous services only, or who are chosen to office, not for their experience in the duties which they may be called to perform, or their peculiar fitness and skill in the work of the different departments, which they may have in charge."¹ The commission recommended that the heads of departments should be nominated by the mayor and confirmed by the city council. They also provided for a more consistent administration in their recommendation that the mayor and the members of the city council should hold office three years.²

The city council failed to adopt a single suggestion.³ In 1877 Mayor Prince referred to the plan as proposing "rather a government for the people than by the people." He believed it implied distrust in "the honesty and capacity of the people to conduct municipal affairs." Though he agreed that certain departments, especially the street and the water, could be managed best by commissioners, he was convinced that business of less importance should be left to the committees. Mayor Prince urged the council to petition for the right to provide by ordinance for the creation or abolition of boards of commissioners.⁴ Henry L. Pierce was in sympathy with most of the recommendations made by the

¹ *City Documents*, no. 3 (1875), pp. v, vi.

² *Ibid.*, no. 3 (1875).

³ *Mayor's Inaugural* (1876), p. 14.

⁴ *Ibid.* (1877), pp. 22-25.

commission.¹ In his inaugural of 1884 Mayor Martin also recorded his approval of the movement.² In 1881, on the other hand, a joint special committee reported in favor of the committee system.³

But, while this agitation was going on, the power of the aldermen was slowly slipping away. In 1875 the appointment of the new park commissioners was given to the mayor, subject to confirmation by the city council. In the same year the new water board was established under similar provisions; and in 1878 the control of the police was intrusted to three commissioners appointed by the mayor with the approval of the city council.⁴

After a decade of continual agitation a second commission was appointed to revise the city charter. Its report, made in 1884, led to the success of the movement for the separation of legislative and executive powers. The commission pointed out that of the \$12,000,000 appropriated during the current year, the expenditure of over \$4,000,000 was controlled either directly or indirectly by committees. They condemned the system as inefficient, irresponsible, and as inviting corruption, and favored the transfer of all executive power from the city council to the mayor and certain heads of departments. The commissioners recommended an executive council, consisting of five members elected by popular vote for two years. Legislative affairs were intrusted to a single council, made up of two members from each ward. The terms of the councilmen and the mayor were fixed at two years. City officials were to be appointed by the mayor with the advice and consent of the executive council. The report also demanded fewer departments, each one under a responsible head.⁵

Chapter 266 of 1885 embodied in the main the reforms outlined by the commissioners.⁶ No change was made, however, in the terms of office of the mayor and city council, and the recommen-

¹ *Mayor's Inaugural* (1878), p. 11.

² *Ibid.* (1884), p. 32.

³ *City Documents*, no. 146 (1881).

⁴ *Ibid.*, no. 120 (1884), pp. viii, ix.

⁵ *Ibid.* (1884).

⁶ *Acts*, 1885, ch. 266.

dations for the establishment of an executive council and a single legislative body were not followed.

Executive powers were vested in the mayor "to be exercised through the several officers and boards of the city in their respective departments, under his general supervision and control."¹ The mayor was to appoint, subject to the confirmation of the aldermen, all the city officials formerly elected by the city council or board of aldermen, with the exception of the city clerk, the clerk of committees, and the city messenger. He might remove for cause at any time, provided he assigned such reason in his order of removal. Executive responsibility was further provided for in the power of appointment and of removal for cause given heads of departments. Officers and boards might make contracts, but all involving an expenditure of over \$2,000 required the approval of the mayor. Heads of departments were to meet monthly for consultation with the mayor.

The separation of the executive and the legislative was made absolute. The members of the city council were forbidden to take part in the employment of labor, the making of contracts, the purchase of materials or supplies or the conduct of any administrative business whatever, "except such as may be necessary for the contingent and incidental expenses of the city council."² The veto power of the mayor was enlarged by allowing him to approve or disapprove separate items in appropriation bills.

The act of 1885 provided that nothing therein should affect the enforcement of chapter 320 of 1884, the great civil service law of the state. The new charter together with the civil service law provided much-needed reforms. The principal provisions of the act of 1884 forbade officials to solicit contributions for political purposes, or to give money to another officer for any political object. It was especially directed against corrupt methods of procuring nominations. Officers and employees of the lower grade of service in state and municipal work were to secure appointment by competitive examination. During this period the custom had arisen of distributing among the members of the

¹ *Acts*, 1885, ch. 266, sec. 6.

² *Ibid.*, sec. 12.

various executive committees tickets, which entitled the holder to employment by the city.¹ While the civil service law promised a much higher grade of workmen, the new charter aimed to make possible the selection of more competent leaders, and endeavored to give a more harmonious and responsible administration.

At last the office of mayor had been made of great importance, and efficient government now depended in greater measure upon the wisdom of the voters in selecting the right man for the office. The new charter went into effect June 26, 1885. In his inaugural of 1886 Mayor O'Brien stated that it was even then proving its value, that the departments were no longer political machines, and that a large sum of money had already been saved to the city.²

EXPENDITURES

The expenditures of 1874 were only \$14,654,954, over \$3,000,000 less than those of 1873. The retrenchment proves to be even greater, when we allow \$1,000,000 for the expenditures of Charlestown, West Roxbury and Brighton, annexed in January, 1874. From 1874 to 1886 the expenditures were practically stationary. It was not until 1887 that the annual appropriations exceeded those for 1874. The per capita expenditures declined from about \$65 in 1873 to \$36 in 1886.

The reduction in 1874 took place in the expenditure for streets, which declined from \$9,382,860 to \$4,875,768. The expenditure of practically all other branches, especially water, increased, largely on account of annexation. In 1875 there began a decline in the expenditures of almost all branches of city activity. By 1879 the expenditures had fallen to \$11,793,875, a reduction due in part to falling prices and wages and also to severe retrenchment.

In 1880 better times caused expenditures to rise to \$12,375,938, a level maintained in 1881. In 1882 a sudden advance in salaries and wages and initial expenditures for the park system carried expenditures to \$13,954,402. From 1882 to 1886 there was practically no change, the period closing with expenditures at \$14,476,863. The very even course of expenditures throughout

¹ *Mayor's Inaugural* (1884), p. 33.

² *Ibid.* (1886), p. 8.

this period, so much in contrast with the sudden changes of preceding years, was due principally to the long-continued depression.

General Government. Expenditures for general government declined from \$500,683 in 1875 to \$422,518 in 1879, and then rose to \$633,459 in 1886. They made up 4.7 per cent of the total expenditures in the period 1883 to 1886, a per capita charge of \$1.58. No extraordinary expenditure for general government occurred.

From 1877 until 1880 the city council was reducing individual salaries. The following table gives the salaries of the higher officers for those years in which a change took place. Practically the same course was taken by the salaries of the lower grades.

	1874	1875	1877	1881	1882	1886
Mayor	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$10,000
Treasurer	5,000	6,000	5,000	6,000	6,000	6,000
Auditor	5,000	6,000	5,000	5,000	5,000	5,000
City Clerk.....	5,000	5,000	4,000	4,000	4,000	4,000
Assessors	3,000	3,000	2,700	2,700	3,000	3,000

Agitation for a reduction of salaries began with retrenchment. Mayor Cobb in his inaugural of 1876 opposed such action on the ground that lower rates of compensation would lead to the employment of inferior men, so that the city would "lose thousands in saving hundreds."¹ The next year a joint special committee demanded a general reduction in keeping with the lower cost of living and the retrenchment, which had taken place in all lines of business.² Considerable reductions were made in 1877, and to some extent in the two succeeding years. After 1879 more prosperous times caused a slight increase in many salaries. The wages of ordinary city laborers were likewise increased in 1883 from \$1.75 to \$2.³

As an illustration of the retrenchment which took place in practically all branches, the expenditures of the auditor's, treasurer's and assessors' departments have been given in the following table.

¹ *Mayor's Inaugural* (1876), p. 9.

² *City Documents*, no. 20 (1877).

³ *Finance Commission*, i, p. 266.

	1876	1877	1880	1886
Auditor's	\$17,000	\$15,000	\$16,000	\$22,000
Treasurer's	24,000	22,000	23,000	33,000
Assessors'	97,000	92,000	97,000	108,000
Total	\$138,000	\$129,000	\$136,000	\$163,000

The expenditures of these departments were reduced on the average by 7 per cent in 1877, and did not regain the level of 1876 until after 1880.

The charter of 1885 stipulated that the mayor should receive a salary of not less than \$5,000. Chapter 361 of the same year provided that after the 26th of June, the day on which the charter was to take effect, the city council might increase the salary of the chief executive, if it so desired. The council raised the salary to \$10,000. It is probable that higher salaries for the heads of departments would in many cases have secured better men. In his inaugural of 1886 Mayor O'Brien stated that failure to give adequate remuneration for talent had lost to the city some of the best engineers in the country.¹

Police. Expenditures for police protection rose from \$882,987 in 1874 to \$1,147,868 in 1886. The relative importance of this branch increased from 5.6 per cent in the period 1868 to 1871 to 7.9 per cent in the years 1883 to 1886, the per capita advance being from \$2.32 to \$2.60.

The annexations of 1874 caused an increase in police expenditure from \$736,396 in 1873 to \$882,987 in 1874. After this unavoidable rise, they fell under the severe retrenchment of the succeeding years to \$837,907 in 1878. The efficiency of the police was increased in 1874 by the purchase of the steamboat, *Protector*, at a cost of \$19,000, for use in patrolling the harbor.² In 1875 the use of saddle horses in the suburbs was begun, an experiment which soon proved successful.³

From 1875 until 1880 the police force stood at practically 700 men except in 1878, when retrenchment brought it for a time to 680. In the same year a lower scale of remuneration was estab-

¹ *Mayor's Inaugural* (1886), p. 29.

² *Ibid.* (1875), p. 20.

³ *City Documents*, no. 7 (1877), p. 31.

lished, which remained in force until 1886. The growth of the department expenditures from 1880 to 1885 was due solely to the advance in numbers, made necessary in large measure by the increase in public grounds.¹ In 1886 the department numbered 785 men.

During the first part of the period much dissatisfaction arose over the lack of discipline in the police department. The powers of the mayor, aldermen and the chief of police were so vaguely defined that the feeling of responsibility was lost.² In his inaugural of 1876 Mayor Cobb stated his belief that the department "would be greatly improved, both in efficiency and economy, by being placed in charge of a Commission."³

Agitation for reform resulted in the passage of chapter 244 of 1878. This law authorized the mayor to appoint with the approval of the city council three commissioners to serve for three years. They might be removed for cause or by a two-thirds vote of each branch of the city council. The appointment of policemen and the issue of licenses were placed in their charge.

The new board of commissioners was only partially successful; political pressure prevented efficient management. In the seven years of its existence the board had ten different members.⁴ The belief that state-appointed commissioners would be more independent of the city council and would better enforce the license law led in 1885 to the passage of chapter 323.⁵ According to the provisions of this law the governor was to appoint from the two principal political parties three citizens of Boston to constitute a board of police. They were to serve for five years unless removed for cause. Boston was to provide such accommodations for the police as the board might require. This change in control was rendered still more effective through the support given by the civil service law of 1884.

¹ *City Documents*, no. 129 (1880), p. 2.

² *Memorial History*, iii, p. 289.

³ *Mayor's Inaugural* (1876), p. 21.

⁴ Ernst, *Constitutional History*, p. 123.

⁵ Storey, *Municipal Government in Boston in Proceedings National Conference for Good City Government*, January 25, 1894, pp. 64, 65.

During this period the pension system was inaugurated. Chapter 244 of 1878 provided that the board of police might "by the affirmative vote of all its members and with the approval of the mayor retire from office any one disabled in actual performance of duty or who has performed faithful service for a period of not less than fifteen consecutive years." The pension was in no case to exceed one-third of the salary received at the time of retirement. The annual expenditure for pensions increased rapidly, amounting to \$28,000 in 1886.

Fire. The reorganization of the fire department which was begun under the new commissioners in 1873, was practically complete in 1874. The expenditure of \$736,566 in the latter year, the first of the period, was made up of \$631,398 for the salaries and general expenditures of the department and \$105,167 for the erection of engine houses.¹ As soon as the commissioners had secured greater efficiency, they turned their attention to retrenchment. After a decline, which lasted into the eighties, expenditures rose to \$789,176 in 1886, but little larger than they were in 1874. In the period 1883 to 1886 the cost of protection from fire was 5.7 per cent of the total city expenditure. The per capita figure was \$1.90.

The commissioners succeeded in raising the efficiency of the department without greatly increasing expenditures. For example, they employed mechanics, who happened to be on the force, in repairing the engine houses.²

After 1874 retrenchment reduced the expenditure for new engine houses from \$105,167 in 1874 to only \$8,950 in 1876; from 1878 until 1882 no expenditure of this nature was made. Expenditures for fire protection decreased from \$736,566 in 1874 to \$566,585 in 1879, due to a decrease in the force, and also to a reduction in salaries made in 1877.³

Better times in the early eighties increased the size of the department. The rise in expenditures, which began in 1880, was checked for a year by a change in the city's method of bookkeep-

¹ See Appendix, p. 357.

² Brayley, *History Boston Fire Department*, p. 307.

³ *City Documents*, no. 28 (1879).

ing. The fire department had been charged an unreasonable sum for the care of hydrants and for water used. This amount had increased from \$59,000 in 1872 to \$128,000 in 1880. In the latter year, at the request of the commissioners, a reduction of $33\frac{1}{3}$ per cent was made by the city council. Even then the charge was deemed excessive by the fire board.¹

A small amount was expended in pensions to disabled and infirm members under the provisions of chapter 107 of 1880. The board of fire commissioners with the approval of the mayor might pension any member, who had become permanently incapacitated in the discharge of his duties, or a member of the permanent force who had served fifteen consecutive years and become incapacitated from other causes. In the first case, the pensioner was to receive one-half his salary; in the second, not over one-third. Provision was also made for the payment of annuities to the widows or young children of firemen killed in the performance of their duty.

In 1881 a committee reported on the advisability of changing the call companies into permanent ones. It concluded that such a step, involving an additional expenditure of \$157,000, was not warranted.² In 1882 the work of building new engine houses was once more prosecuted, the expenditure for this object advancing from \$8,590 in 1882 to \$72,413 in 1886.

The management of the fire department remained throughout the period in the hands of the three commissioners appointed by the mayor. By the charter of 1885, however, the power of confirming these appointments was transferred from the city council to the board of aldermen.

Institutions. The expenditure for institutions advanced from \$810,833 in 1874 to \$996,394 in 1875 and then fell to \$802,377 in 1878. During the succeeding years it rose to \$1,097,542 in 1886. The relative importance of this expenditure was 8.5 per cent in the years 1883 to 1886, and the per capita charge, \$2.80.

The expenditures for out-door relief increased from \$86,920 in 1873 to \$126,518 in 1874.³ Part of this advance was due to the

¹ Brayley, *History Boston Fire Department*, p. 320; *Mayor's Inaugural* (1881), p. 24.

² *City Documents*, no. 86 (1881).

³ See Appendix, p. 359.

annexations. Then, an entirely new expenditure was that for physicians and medicines. This service the Boston Dispensary, a private institution, had been able to provide for the entire city until 1874, when limited resources prevented the extension of its work into the annexed territories.¹ Moreover, greater demands were made upon the department in the depression following 1873. An effort was made to induce the city to provide work for its unemployed. In his inaugural of 1875 Mayor Cobb declared that, "such an idea, if consistently carried out, would be subversive of our whole social fabric, tending directly to Communism in its worst form."² The city council of 1875, however, gave work at low wages to citizens having families.³

The increased expenditures of the overseers were also the result of the adoption in 1874 of a strict law of settlement. The act had the effect of diminishing the number of state paupers and correspondingly increasing the burden upon the various towns and cities.⁴ The law of 1874 was held responsible for doubling the number of city cases in the succeeding year.⁵

In 1877 the expenditures of the overseers fell from \$127,543 to \$110,438, and in 1878 to \$102,025, a level maintained until 1882 when they became somewhat higher. The passing of the most severe stage of the depression was partially responsible for this decrease. A saving was made also through the application of more rigid examinations in the distribution of alms.⁶

The charter amendments of 1885 transferred the appointment of the overseers from the city council to the mayor. He was to appoint subject to the approval of the aldermen.⁷ The trust funds controlled by the overseers increased from \$250,000 in 1870 to \$510,000 in 1880.⁸

The movement for a better classification of the inmates of the institutions, which had met with some success in the preceding

¹ *City Documents*, no. 59 (1877), p. 5.

² *Mayor's Inaugural* (1875), p. 8.

³ *Ibid.* (1876), pp. 28, 29.

⁴ *Ibid.* (1878), p. 38.

⁵ *City Documents*, no. 74 (1875), pp. 5-7.

⁶ *Ibid.*, no. 54 (1878), pp. 2-4.

⁷ Ernst, *Constitutional History*, p. 118.

⁸ *Mayor's Inaugural* (1880), p. 44.

period, led to further changes in this. In 1873, it will be remembered, the city purchased Austin Farm as a home for some of its paupers. No improvements were made upon this property until 1876. In his inaugural of 1875 Mayor Cobb had urged the need of immediate action to secure accommodations for the institutions, already far too crowded on Deer Island.¹ When the buildings were finally completed in 1877, the female paupers were transferred from Deer Island to Austin Farm.

In 1876 the old Roxbury almshouse on Marcella Street was refitted as a home for pauper and neglected boys,² and the Charlestown almshouse was made ready for the reception of the aged charges of the city. In 1879 the expenditure of the Marcella Street establishment was increased by the erection and maintenance of a home for girls.³ In 1884 the city purchased Long Island at a cost of \$159,000 for the use of the institutions, and \$65,000 was expended during 1885 and 1886 in the erection of buildings, designed to shelter about five hundred paupers.⁴ The cost of providing more adequate shelter for the paupers is reflected in the growth of expenditures for this branch from \$209,936 in 1874 to \$343,765 in 1886. The number of the inmates increased from 1,513 in 1874 to 2,378 in 1886.

The auditor's report for 1877 records on page 136 the initial expenditure of \$4,543 for a stone-cutting establishment for Deer and Rainsford Islands. The city council determined to provide work for all able-bodied men committed to these institutions with a view to reducing the number of those who sought therein a comfortable home during the winter months.⁵ The introduction of this employment undoubtedly saved the city much needless expenditure in the support of shiftless men.⁶ The house of correction remained at South Boston despite the protests of citizens of that peninsula and the appeal of Mayor Cobb for its removal.⁷

¹ *Mayor's Inaugural* (1875), p. 16.

² *City Documents*, no. 49 (1877), p. 19.

³ *Mayor's Inaugural* (1880), p. 44.

⁴ *Auditor's Report* (1886), p. 289.

⁵ *Mayor's Inaugural* (1878), p. 37.

⁶ *City Documents*, no. 66 (1880), p. 29.

⁷ *Mayor's Inaugural* (1875), p. 17.

The completion in 1878 of a state hospital for the insane at Danvers provided accommodations for 450 near Boston. The directors of the city lunatic hospital, however, were reluctant to permit transfers and still insisted that the city should build a new hospital. This project Mayor Prince strongly opposed on account of the great expenditure involved.¹ By the time a small number had been transferred to the Danvers asylum the institution had been completely filled.² But the rapid increase in the number of its insane compelled the city to transfer the majority to state asylums. The city had in state institutions, 146 in 1875, 465 in 1880 and 622 in 1885.² In 1880 only 164 were supported at the South Boston institution, this being reserved principally for the reception of the aged and infirm.³ In 1882 the accommodations were somewhat enlarged. At the end of the period Boston was facing the possibility of being obliged to provide for all her insane charges. The state institutions were crowded, and the legislature was insisting that the city make provisions for the support of her insane.⁴

At the beginning of the period the city hospital was in need of immediate enlargement. An appropriation of \$190,000 was made by the city council for that purpose, and expended in the years 1875 and 1876.⁵ In his inaugural of 1876 Mayor Prince recommended the incorporation of the trustees, as a means of securing more efficient management and of attracting a larger number of donations.⁶ It was not until 1880, however, that the city council voted to allow incorporation; their reluctance was due to the mistaken belief that this action would place the management of the hospital beyond their control.⁷ The expenditures of the institution increased from \$125,283 in 1874 to \$202,944 in 1886.

The department of public institutions continued in the hands of the twelve directors until 1885. Three of the directors were, in accordance with the act of 1857, chosen from the city council.

¹ *City Documents*, no. 60 (1878).

² *Ibid.*, no. 66 (1880), p. 33.

³ *Mayor's Inaugural* (1881), pp. 32, 33.

⁴ *Ibid.* (1886), p. 50.

⁵ *Ibid.* (1875), p. 16.

⁶ *Ibid.* (1879), p. 63.

⁷ *Ibid.* (1880), p. 51.

Consequently, after the enactment of the new charter, which forbade members of the city council to serve on executive boards, the number of the directors was reduced to nine. The act of 1885 also transferred the power of appointing the directors from the city council to the mayor, subject to confirmation by the aldermen.

Public Grounds. The expenditure for parks and public grounds increased from an average of \$139,261 in the years 1868 to 1871 to \$731,570 in the period 1883 to 1886. This increase represented a change in relative importance from 1.3 per cent to 5.7 per cent of the total city expenditures. The per capita charge advanced from \$0.55 to \$1.87.

The establishment of a public park system was one of the few extraordinary undertakings of this period of retrenchment. The recommendations made by Mayor Cobb in his inaugural of 1874 led to the appointment of a commission, consisting of the mayor, two aldermen, three members of the common council and three citizens at large, to consider the establishment of a park system. After several large public hearings had been given, at which no one opposed the project, the commission reported on November 25th in favor of a park in the territory between Arlington Street and Parker's Hill, and of a series of parks, connected by roads between the third and fourth mile circles. In his inaugural of 1875 the Mayor urged that action be taken immediately for the purchase of suitable tracts of land, pointing out that the existing depression in real estate offered an excellent opportunity. The improvement of the land, according to the Mayor, could await the return of better times. The cost of developing the territory, he believed, should be borne by taxation.¹

The city council, accordingly, petitioned the legislature for an act authorizing the establishment of a park system. Chapter 185 of 1875, accepted by the voters on June 9th, empowered the mayor to appoint with the approval of the city council three commissioners to serve without pay for three years. No expenditure could be made by them without previous authorization by the city council. The act gave them power to take land by pur-

¹ *Mayor's Inaugural* (1875), pp. 25, 26.

chase or otherwise and to levy assessments on property benefited, amounting to one-half the benefit. The money needed for the purchase of the necessary land might be obtained by loans. Sums received for betterment were to be paid into a sinking fund established for the amortisation of the park debt.

The park commissioners, appointed under authority of this act, prepared plans for a series of parks. Their report submitted early in 1876 called for the purchase of land involving an expenditure of \$5,000,000.¹ A committee urged its immediate purchase. They believed the present time favorable not only for the acquisition of the land but also for its improvement, since labor was very cheap. The development of the territory, they said, would provide work for the unemployed.²

By the end of the year, however, considerable opposition had developed. On November 20th Alderman Burrage made a very strong protest against the establishment of the proposed park system. He believed that parks were expensive luxuries. He found it "difficult to see how, upon any of the accepted principles of political economy, the taking of a portion of the capital employed in profitable business to obliterate the productive and taxable character of a large amount of landed property within its limits, can add to the business and financial prosperity of a city any more than the destruction of property by fire can be of real benefit to the pecuniary interest of the community."³ He stated that the financial condition of the city did not warrant such a large expenditure. Although many were opposed to the immediate expenditure of money for park purposes, they did not hold such extreme opinions. A joint special committee, reporting on December 28th, considered the plans of the commissioners too extensive and too elaborate. They did recommend, however, the immediate appropriation of a small sum.⁴

In his valedictory address, at the close of 1876, Mayor Cobb strongly recommended the immediate purchase of land.⁵ The advocates of this plan insisted that the cheapness of land and labor

¹ *City Documents*, no. 42 (1876).

² *Ibid.*, no. 72 (1876).

³ Speech of Alderman Burrage in *Board of Aldermen*, November 20, 1876, p. 13.

⁴ *City Documents*, no. 105 (1876).

⁵ *Valedictory Address* (1876), p. 7.

justified the commencement of the work at once. They declared that postponement until more prosperous times would mean the loss of the park system.¹ In May, 1877, a committee reported in favor of an immediate appropriation of \$1,000,000 for the purchase of lands. They believed that the expenditure of public money at this time would stimulate trade.² On recommendation of the commissioners, the city council in July authorized the taking of certain low lands in the Back Bay.³ The changing of these flats, long the receptacle of the sewage of Muddy River and Stony Brook, into an attractive park was also a sanitary measure.

One hundred and six acres were purchased by the commissioners, at an average price of ten cents a square foot. The cost of the land was about \$460,000.⁴ The greater part of this amount was eventually repaid from betterments assessed by the commissioners on abutting property.⁵ The purchase of this land is recorded by the rise in the expenditure for public grounds from \$171,496 in 1876 to \$507,346 in 1877. During the next few years the filling in of this territory caused a small expenditure.

In December, 1879, the commissioners advised the purchase of certain lands in West Roxbury, believing that the time had come for a more rapid carrying out of the original plans. Though the proposal received the support of Mayor Prince, the city council was loath to make the necessary appropriation.⁶ It was urged by opponents of the project that the scheme was the result of an attempt of landowners in West Roxbury to dispose of their property at exorbitant prices. In his inaugural of 1881 the Mayor pointed out that, if such were the case, the land might be taken under the extraordinary powers granted in the park act. He firmly believed that the interests of the city required the immediate acquisition of this land, before the revival in business had gone so far as to make the price of real estate excessive.⁷ It

¹ *Mayor's Inaugural* (1877), pp. 20, 21.

² *City Documents*, no. 44 (1877).

³ *Mayor's Inaugural* (1878), p. 31.

⁴ *Ibid.* (1880), p. 22.

⁵ *Memorial History*, iii, p. 285.

⁶ *Mayor's Inaugural* (1880), p. 24.

⁷ *Ibid.* (1881), p. 27.

was not until 1883 that authority was given for the establishment of the West Roxbury Park. This territory was opened to the public in the spring of that year in an unimproved condition.¹

Meanwhile the city council had decided upon the establishment of several other parks. In 1881 the Riverdale improvement, an extension of the parkway from Back Bay to Jamaica Pond through the Muddy River Valley, was authorized, and an appropriation of \$200,000 made for this object. On December 30, 1882 the commissioners under the authority of chapter 144 of 1880 took the Arnold Arboretum and other lands. The Arboretum, which had belonged to Harvard College, was then leased to the college on condition that it bear the cost of planting and caring for the grounds.² Wood Island Park in East Boston was purchased in 1882 at a cost of \$50,000.

In 1883 the commissioners took for sanitary and park purposes flats lying between the West Boston Bridge and Craigie's Bridge, contemplating the building of an embankment and the filling in of the enclosed land.³ On April 30, 1883 the flats at City Point were taken for the construction of Marine Park. Thus, before the end of this period the city had acquired, at a time when real estate values were still low, a large part of its present park system. The cost of the land was about \$2,000,000, the West Roxbury territory being responsible for one-half this expenditure. The necessary funds were obtained by loans issued under authority of the original park act, or under chapter 168 of 1882, which empowered the city to contract thirty-year loans for the acquisition of lands for park purposes.

The next problem of the park commissioners was the improvement of this territory. The city had very wisely taken certain lowlands, whose filling in would greatly improve sanitary conditions. The activity of the city in improving a part of the Back Bay purchase led private parties to fill in adjoining lands. This large extent of territory would have been left unimproved for years if the city had not taken the initiative. The almost immediate rise in the value of adjacent property proved the wis-

¹ *Mayor's Inaugural* (1884), p. 16.

² *Ibid.* (1885), pp. 77-80.

³ *Acts*, 1881, ch. 92.

dom of the city in selecting this site for its first park.¹ The work of developing the Back Bay Park progressed slowly but steadily; during the period over \$1,000,000 was spent in its improvement. This amount was derived from taxation.

It soon became evident that the development of the park system would be extremely slow, if the policy of paying for improvement out of taxation were longer followed. Chapter 304 of 1886 was, therefore, obtained, granting the city power to borrow to an amount not exceeding \$500,000 in each year, or \$2,500,000 in all, for the purpose of purchase and construction. These loans were to be issued outside the debt limit, and were to run for fifty years. No loan was authorized in 1886, owing to the refusal of the aldermen to give the necessary two-thirds vote.²

The great increase of expenditure for parks and public grounds during this period was due to the establishment of the new park system. The management of the Common and other public grounds remained in charge of a separate department. Of the \$6,000,000 expended during the period, \$2,500,000 was appropriated for the use of the superintendent of public grounds and \$3,500,000 for the work of the park commissioners. Over \$2,000,000 of this latter amount was used for the purchase of park lands.

Streets. The policy of retrenchment enforced during this period is best seen in the course of expenditures for streets and kindred objects. The expenditures of this branch fell from \$9,382,860 in 1873 to \$4,875,768 in 1874, and \$2,816,441 in 1877. From this low point street expenditures increased slowly to \$4,484,529 in 1883, when the depression of 1884 caused further retrenchment. In the years 1883 to 1886 expenditure for streets constituted 29.5 per cent of the total expenditures. The per capita charge was \$9.75.

Streets Proper. The expenditure for streets proper fell from \$7,369,398 in 1873 to \$2,793,518 in 1874.³ In his inaugural of 1875 Mayor Cobb declared it was "time to pause for a while in this magnificent but costly career of street-widening and wait for better times."⁴ He said that Boston, as long as she advanced in

¹ *Mayor's Inaugural* (1880), p. 22.

² *Ibid.* (1887), p. 36.

³ See Appendix, p. 362.

⁴ *Mayor's Inaugural* (1875), p. 14.

size and prosperity, must always expect some inconvenience from crowded streets, but that this did not justify an unlimited expenditure. The postponement of street improvements reduced the total expenditure for streets to \$1,050,858 in 1878. The cost of laying-out and widening fell to only \$289,497 in 1877. But for the demands of the annexed territory the expenditures would have fallen even lower.

In 1879 the expenditure for streets began to move upward again, a very large part of the expenditure being for improvements in the suburbs. From 1874 to 1883 the cost of building and repairing streets in the outlying districts of the city was over \$5,000,000.¹ The city was pursuing in the suburbs exactly the same policy, which had made street improvements within the city proper so costly. Streets were laid out haphazard, without regard to any systematic plan for future improvements. The work of the street commissioners was largely confined to the acceptance or rejection of private ways already laid out.² In his inaugural of 1874 Mayor Cobb urged the defining of street lines in advance of the growth of population.³ In 1876 the park commissioners remarked that "the growth of Boston, from its infancy (as shown in its streets), has, till within a very few years, been without method, dependent chiefly upon the individual fancy or convenience of property owners, instead of being directed by municipal authority."⁴ This same policy, they affirmed, was still practiced in the suburbs with the probability of like results. A similar opinion was expressed by Mayor O'Brien in 1885 when he said that during the previous twenty-five years Boston had "expended millions of dollars for widening and extending streets that could have been saved if some systematic plan had been adopted."⁵ The commission on the revision of the city charter, reporting in 1884, demanded "a comprehensive plan of prospective streets and ways in the outlying sections of the city." "For want of such plan," the report continued, "a vast amount of

¹ *City Documents*, no. 120 (1884), p. xx.

² *Ibid.*, no. 220 (1894), p. 83.

³ *Mayor's Inaugural* (1874), p. 31.

⁴ *City Documents*, no. 42 (1876), p. 3.

⁵ *Mayor's Inaugural* (1885), p. 33.

property in buildings has been destroyed by the change of street lines and grades." ¹ The commission also recommended securing the right of assessment upon abutting property of the whole cost of the improvement. Boston did not provide for systematic street improvements in the suburbs until the creation of the board of survey in 1891. ²

The policy of retrenchment, so long adhered to by the city council, led to vigorous demands for the immediate construction of streets already laid out by the commissioners. In 1885 petitions were on file for work involving an expenditure of \$3,000,000. ³ It is very likely that retrenchment was carried too far at this time. Certain residence sections of the city were growing very rapidly, and Boston could not afford to take the chance of checking their development by refusing to provide good streets, sewers, water, and other conveniences. In 1886 Mayor O'Brien recommended to the city council the very careful consideration of this point. He cited the case of Humboldt Ave., where the work of construction was still delayed, although the street was laid out nearly three years previous. In this case abutting property had been assessed at a higher valuation in view of the contemplated improvement and yet could not be sold or improved before the completion of the avenue. ⁴

Before the civil service law of 1884 and the charter reform of 1885 the street department probably suffered more than any other from its connection with politics. In 1884 Mayor Martin stated that "the loss to the city from the employment of unskilled foremen and inefficient workmen, billeted upon the heads of departments, cannot be measured by the current expenses of a single year." ⁵ The reforms of 1884 and 1885 greatly improved conditions of employment; in his inaugural of 1886 Mayor O'Brien expressed the opinion that the street department was no longer a political machine. ⁶

¹ *Mayor's Inaugural* (1885), p. 33.

² *City Documents*, no. 220 (1894), p. 82.

³ *Mayor's Inaugural* (1885), p. 41.

⁴ *Ibid.* (1886), p. 19.

⁵ *Ibid.* (1884), p. 34.

⁶ *Ibid.* (1886), p. 37.

Lighting. The demand of the annexed territories for street lighting carried the expenditure of this branch from \$384,760 in 1873 to \$440,909 in 1874, and \$496,456 in 1875. By 1880 one-half the street lamps were in the recently-acquired districts, and more than one-half the annual appropriation was required for the extension and maintenance of the suburban service. In 1867, before the first annexation took place, Boston had but 85 miles of lighted streets; in 1879, 400 miles were lighted. The number of lamps had meanwhile increased from 6,757 to 12,415.¹

This period, like preceding ones, had its discussions as to the wisdom of establishing a municipal gas plant. In his inaugural of 1875 Mayor Cobb spoke of the general dissatisfaction among consumers with the price of gas. The Mayor favored regulation of the existing company in preference to municipal manufacture. Though he admitted that the latter method offered a possible solution, he believed it should not be employed until all other means had been tried. At his suggestion a special commission was appointed to investigate the matter.² The report of the commissioners favored the existence of a single company in the city. Their investigations led them to conclude that the price given by the Boston Gas Light Company was for the quality of gas supplied lower than that in most American cities. They recommended, however, that the city council apply for authority to erect gas works, and then use the act as a lever in securing better terms from the private company.³ No further action was taken.

When the demands of the annexed territories had been met, the city council turned its attention to retrenchment. Expenditures fell from \$496,456 in 1875 to \$396,758 in 1879. In his inaugural of 1879 Mayor Prince declared that something should and could be done to "lessen the cost of lighting this city, greater, . . . than that of any other of its size in the country."⁴ The result of the Mayor's efforts was the substitution of the three-foot burner in place of the four-foot. This change resulted in a saving of

¹ *Mayor's Inaugural* (1880), p. 61.

² *Ibid.* (1875), pp. 22-25.

³ *City Documents*, no. 91 (1876), p. 67.

⁴ *Mayor's Inaugural* (1879), p. 50.

\$40,000 in 1879, bringing expenditures to the very low figure of \$396,758.¹ But the citizens of Boston refused to be satisfied with the inferior service. Here, as in other cases where economy and quality of service conflicted, the former gave way to the latter. Before the end of 1880 the city council had restored the four-foot burners, securing at the same time lower rates from the gas companies.²

The return to the four-foot burner and the introduction of further improvements carried expenditures from \$396,758 in 1879 to \$524,923 in 1886. In 1880 wooden lamp posts were largely replaced by iron.³ In 1882 the city made its first expenditure for electric lights, and the introduction of the new lamp proceeded rapidly, absorbing in 1886 almost one-fourth the total expenditure. The electric light was essentially a luxury, justified alone by the better grade of service rendered. The cost of maintaining a single electric light was \$237 a year; it displaced $3\frac{1}{2}$ ordinary street lamps, each requiring an expenditure of \$34 a year.⁴ In 1886 the city had 13,425 lamps; of these, 10,139 were gas, 2,785 oil, and 501 electric.

Sewers. Although the raising of the low lands put an end to overflows, the health of the city was still endangered by the fringe of sewers which emptied into tide water on all sides of Boston. In 1874 the board of health called the attention of the city council to the necessity of better sewerage, attributing the excessive number of summer diseases to the lack of a good system.⁵ The cost of improving the sewerage is recorded in the rise in expenditures from \$241,392 in 1874 to \$1,596,043 in 1883; the period closed with an expenditure of \$751,612.

Agitation for better sewerage led the city council in 1875 to appoint a commission to investigate the subject. Its report proved conclusively the necessity of immediate action, and also laid down the lines along which the new system was subsequently constructed. The report pointed out that the death rate had not been excessive until the growth of population had made the dis-

¹ *Mayor's Inaugural* (1880), p. 61.

² *Ibid.* (1881), p. 41.

³ *Ibid.*

⁴ *Ibid.* (1884), p. 25.

⁵ *City Documents*, no. 112 (1874), p. 5.

charge of sewage in the immediate vicinity of the city a serious menace. The commission found that there were thirty-two independent drainage districts in the city proper, the sewers of which discharged by separate outlets. They recommended the construction of intercepting sewers around the borders of the city to receive the contents of the local sewers. These intercepting sewers were in turn to empty into a main sewer, which was to carry the sewage to a pumping station at Dorchester Bay. Then, it was to be pumped across the bay to Moon Island, the point of final discharge in the lower harbor.¹

The report of the commission resulted in the appropriation in July, 1876, of \$40,000 for accurate surveys and estimates.² After a year spent in making the necessary plans, the city council in August, 1877, appropriated the \$3,713,000 estimated as necessary for the undertaking.³ In his inaugural of 1877 Mayor Prince stated that the necessity of the improvement justified its great cost. He referred to Boston as one of the most unhealthy of the larger cities.⁴ Authority for the construction of the new main sewer was granted by chapter 136 of 1876. Chapter 256 of 1882 provided that the sewage of the city should be discharged at Moon Island only. Construction was begun in 1877, and practically brought to an end in 1884 when the new system went into operation. The cost of the work was about \$5,000,000, the excess over the estimates being due in part to the rise in the price of materials and labor in the early eighties.⁵ The substitution of one point of discharge, remote from the city, in place of the many outlets into the contiguous tide waters was of very great benefit to the health of the inhabitants. The water of the docks was again pure; the offensive odors so long noticeable were gone and cellars were relieved from periodic flooding.

Another source of expenditure was the Stony Brook nuisance. For many years this stream had discharged the sewage of the Roxbury district into the Charles River by way of the Back Bay

¹ *City Documents*, no. 3 (1876).

² *Mayor's Inaugural* (1877), p. 15.

³ *Auditor's Report* (1877), p. 37.

⁴ *Mayor's Inaugural* (1877), p. 14.

⁵ *Ibid.* (1883), p. 29.

flats.¹ The pollution of its waters was stopped with the construction of the intercepting sewers.² But the brook had for some years caused considerable danger through periodic overflows. With the growth of population the old channel had been encroached upon, and the storage areas filled in. Consequently, in the time of freshets the brook flooded the surrounding territory.³ Previous to their annexation, both the city of Roxbury and the town of West Roxbury had expended large sums for the improvement of Stony Brook.⁴

The problem had been before the city council since the last of the sixties. Chapter 196 of 1874 gave the city power to make the improvement, assessing the cost in proportion to the benefit received. Although work on the new channel was begun in 1878, very little was done until 1880, owing to a delay caused by the adjustment of claims presented by the Boston Belting Company for the loss of its rights on the stream.⁵ When the improvements were finally completed in 1884, the expenditure of the city amounted to \$370,000. The work was looked upon as successful.⁶

In February, 1886, however, there occurred a freshet which caused an overflow of unprecedented extent. The city was made the defendant in many damage suits. In a special message Mayor O'Brien referred to the money expended on Stony Brook as having been to a great extent wasted. He considered the work "a most faulty piece of engineering."⁷ A commission was at once appointed to report on the "Prevention of Floods in Stony Brook," and recommended the construction of a new channel of larger capacity at an estimated cost of \$593,000 for the Roxbury district. They advised its continuation at a later time to West Roxbury, at an additional expenditure of \$1,319,000. Still further extension in the distant future was to call for \$1,000,000 more.⁸

¹ *Mayor's Inaugural* (1877), p. 36.

² *Ibid.* (1880), p. 55.

³ *City Documents*, no. 166 (1884), pp. 2, 3.

⁴ *Ibid.*, no. 25 (1877).

⁵ *Mayor's Inaugural* (1879), p. 51.

⁶ *City Documents*, no. 166 (1884), p. 3.

⁷ *Ibid.*, no. 61 (1886).

⁸ *Ibid.*, no. 159 (1886).

Public Lands. Expenditure for public lands practically came to an end with this period. The flats, which the city formerly owned, had all been raised to a satisfactory grade, and the greater part had been sold. Expenditure incurred for this branch was confined almost entirely to the cost of raising the Northampton Street district and of filling in the old Roxbury Canal.

The owners of land in the Northampton Street district had been given the choice of raising the level of their estates themselves, or of allowing the city to do the work, assessing the cost upon the property. With few exceptions they requested the city to perform the work, with the understanding that a more favorable contract could be made for the entire filling.¹ This work, begun in 1874, was practically completed by 1879, at a total cost of \$561,000. Assessments and miscellaneous receipts amounted to \$172,000, reducing the net cost of the improvement to \$389,000.²

The filling of the Roxbury Canal was undertaken to remove a nuisance. The canal, fifty feet in width, was built in 1795 for the purpose of saving two and one-half miles of land carriage; it extended from South Bay almost to Eustis Street. It was never a paying investment, and for some years had served chiefly as a point of discharge for sewage.³ The communication of the board of health in 1874 especially recommended the removal of this nuisance,⁴ and in 1877 the city obtained a special act conferring authority to take the necessary estates and to fill up the old canal. Commissioners were to be appointed to assess damages.⁵ The cost of the work was estimated at \$340,000, and the market value of the land to be secured by the improvement, at \$347,000.⁶ The undertaking was prosecuted during 1878, 1879, and 1880, and resulted in a total expenditure of \$372,000, a figure not much above the estimate. The city was disappointed, however, in the return obtained from the sale of the new land. This amounted to

¹ *City Documents*, no. 25 (1875), p. 4. ² *Ibid.*, no. 220 (1894), p. 243.

³ *Memorial History*, iii, p. 573.

⁴ *City Documents*, no. 112 (1874).

⁵ *Acts*, 1877, ch. 217.

⁶ *City Documents*, no. 59 (1878), p. 4.

only \$98,000, making the net cost of abating the Roxbury Canal nuisance \$274,000.¹

Although the city was no longer improving land for sale, it was obtaining, as the result of private and especially state expenditure, additions to its taxable real estate. The Back Bay territory, filled in by the commonwealth and the Boston Water Power Company, was practically all sold during this period. This venture gave the state a net profit of \$3,000,000.² In 1873 the state began the task of improving the South Boston flats. The material required for the filling was taken from an adjacent shoal in the upper harbor, a course which added considerably to the anchorage facilities of the port of Boston. The work was begun under an agreement entered into between the city, the state, the Boston and Albany Railroad, and the Boston Wharf Corporation.³ For its part the city agreed to connect the new territory with Boston proper by the construction of two bridges across Fort Point Channel. It was also to extend Eastern Avenue to the foot of Summer Street, and Northern Avenue to a point near the foot of Oliver Street.⁴ The city had entered into the agreement on the representation of a joint committee that the receipts from the taxation of this improved property would be sufficient to pay the interest on the cost of the avenues and bridges.⁵ The decline in the city's landholdings was reflected in the abolition of the office of superintendent of public lands in 1880, and the transfer of the few remaining bits of land to the care of the street commissioners.⁶

Bridges. The large expenditures for bridges in 1874 and 1875 were due in great measure to the granting of better accommodations for South Boston. During these years the Broadway Bridge was rebuilt, and the Eastern Avenue Bridge, connecting the South Boston flats with the city proper, was constructed. In 1876 \$88,000 was expended on the Dover Street Bridge.

¹ *City Documents*, no. 220 (1894) p. 243.

² *Ibid.*, no. 36 (1894), p. 28.

³ *Mayor's Inaugural* (1874), p. 9.

⁴ *Memorial History*, iii, p. 299.

⁵ *City Documents*, no. 75 (1872), p. 7.

⁶ Ernst, *Constitutional History*, p. 140.

During the latter years of the period the project for a new Cambridge bridge, midway between the West Boston and Cottage Farm Bridges, was much discussed. The extension of West Chester Park northerly across the Back Bay lands to the Charles River and southerly to Dorchester had greatly benefited this region. Its further extension across the river offered direct communication between Dorchester and Harvard Square. In his inaugurals of 1885 and 1886 Mayor O'Brien urged the building of the necessary bridge.¹ The act authorizing its construction provided that the cost should be borne equally by Boston and Cambridge.² Although Cambridge was prepared to pay her share, Boston held out until the very end of the period.

Ferries. The expenditure for ferries fell from \$265,408 in 1874 to \$168,788 in 1880. Then, it rose, on account of the cost of better accommodations, to \$300,617 in 1884; in 1886, the ferry service demanded \$201,230, this amount representing the expenditure for maintenance.

In 1886 charges of mismanagement were made against the directors. A committee, appointed to investigate the matter, reported that the lack of a responsible head had led to a careless and wasteful administration.³ Mayor O'Brien recommended the abolition of the board of directors and the bestowal of its powers upon a single superintendent, responsible to the mayor. The city council was unwilling to make the change, and so the Mayor was restricted to the appointment of a new board. For a considerable part of the year the department was managed by three of the five directors, the aldermen refusing to confirm the other two.⁴

Health. The expenditure for public health increased but little during the period. The sanitary condition of the city improved greatly after the establishment of the board of health in 1873. Better service was rendered without an increase in cost.

Library. From an average expenditure of \$57,560 in the years 1868 to 1871, or 0.5 per cent of the total expenditure, the cost of

¹ *Mayor's Inaugural* (1885), p. 61; *Ibid.* (1886), p. 67.

² *Acts*, 1874, ch. 314.

³ *City Documents*, no. 205 (1886).

⁴ *Mayor's Inaugural* (1887), pp. 46-48.

the library rose to \$197,054 in the period 1883 to 1886, or 1.5 per cent. The per capita charge increased in the meantime from \$0.23 to \$0.50. The cause of this advance was the demand for adequate accommodations.

The period opened with the completion of an addition to the old building, which, it was believed, would give sufficient space for many years.¹ By 1880, however, the needs of the library had so increased as to cause Mayor Prince to recommend an entirely new building. He believed that the state would be willing to give a site in the Back Bay.² The city succeeded in obtaining from the state the grant of a piece of land on Boylston and Dartmouth Streets, on condition that it erect a library building thereon within three years. All citizens of the commonwealth were to have the right of access free of charge.³ The time allowed for the commencement of the building was subsequently extended three years.⁴

During 1883 and 1884 \$200,000 was paid for a triangular lot, heretofore supposed to be a part of Copley Square, but in reality the property of a private individual.⁵ The work of construction was delayed until 1886 on account of the depression. The trustees asked in the first place for a building, costing \$800,000, sufficient for fifty years growth. They were obliged to content themselves with an appropriation in 1885 of \$450,000.⁶ Work was begun on a more modest structure. But \$70,000 had been expended, when construction was held up by the demand for further consideration. The discussion finally resulted in the erection of the magnificent building, completed in 1894.

The desire to increase the number of donations led to the passage of chapter 114 of 1878 which incorporated the trustees. The act authorized them to receive and hold gifts of real and personal estate to the amount of \$1,000,000.

Schools. The period began with an expenditure for schools of \$2,081,043, a figure not reached again until 1889. This very great expenditure was the result of extravagance in schoolhouse

¹ *Mayor's Inaugural* (1875), p. 18.

³ *Acts*, 1880, ch. 222.

² *Ibid.* (1880), p. 41.

⁴ *Ibid.*, 1883, ch. 141.

⁵ *Mayor's Inaugural* (1885), pp. 53, 54.

⁶ *Ibid.* (1886), pp. 55, 56.

construction and the demands of the annexed communities. With the call for severe retrenchment expenditures declined rapidly to \$1,652,245 in 1879. At this level they remained until the demand for new schoolhouses carried them to \$1,908,655 in 1883. In the period 1883 to 1886 the expenditure for schools made up 14.9 per cent of the total expenditures; the per capita charge was \$4.94.

The charter of 1854 had placed the management of the schools in a committee of seventy-four members. As time went on, it became apparent that this body was too large for efficient and responsible management.¹ The rapid rise in school expenditure toward the end of the preceding period contributed to the movement for reform. Chapter 241 of 1875 was obtained. This act reduced the size of the committee to twenty-four members, elected by the voters, and the mayor, who, ex-officio, was to serve as chairman. The charter of 1885 subsequently removed the mayor from the committee, but allowed him a limited veto over all committee votes involving the expenditure of money. Though the act of 1875 increased the efficiency of the committee, it did not take away its independence in the spending of money.

The story of school expenditure during this period is largely the story of the constant demand of the mayor and city council for retrenchment, and the attempts of the committee to satisfy this demand without injury to the schools. In 1875 Mayor Cobb stated that the expenditure for new buildings could be much reduced in the future, "partly because the most pressing wants in this direction have been already met," and partly, he hoped, "because . . . a modest architecture and a less elegant and luxurious style of finish will be found quite as serviceable."² The expenditure for new houses was reduced in 1875 from \$356,669 to \$277,746.³ Meanwhile the city had gone beyond the requirements of the school population. Large and costly buildings had been erected, where smaller structures or additions would have been sufficient. In 1876, according to Mayor Cobb, there were 10,000 vacant seats. "It may be inferred," the Mayor said, "that the erection of large and costly schoolhouses has in these

¹ *Mayor's Inaugural* (1875), p. 18.

² *Ibid.*

³ See Appendix, p. 365.

latter years been pushed somewhat beyond the reasonable requirements of the city." He considered the appropriations asked by the school committee in recent years unnecessarily large. Mayor Cobb expressed the hope that the new committee would by reason of its "more compact and effective organization, . . . be able, as well as disposed, to coöperate with the city council." ¹

In 1876 the expenditures were reduced from \$2,015,380 to \$1,816,615. This saving was due in part to a smaller appropriation for new schoolhouses and in part to a decrease in the number of teachers, through consolidation of the schools. In 1877 further retrenchment was obtained through consolidation and by a reduction in individual pay. At the beginning of the school year 1877-78 the school committee reduced salaries by 7½ per cent, thereby saving \$100,000.² In 1879 the committee brought expenditures to the lowest point reached during the period — \$1,652,245. A sub-committee was appointed in that year to consider the possibility of still further saving, but was unable to recommend any reduction.³

In 1880 the city petitioned the legislature for an act limiting the expenditure of the school committee to the amount appropriated by the city council. It was argued before a committee of the legislature that the power of school committees in the state to spend money without check was an anomaly among the laws of a democratic government. Per capita figures of school expenditure in different cities were brought forward to prove that the very high figure in the case of Boston was due in part at least to the extravagance of her school committee.⁴ The movement received the approval of Mayor Prince in his inaugural of 1881.⁵ Boston was unsuccessful, however, in securing the desired legislation.

The rise in expenditures, which took place after 1882, was due chiefly to the increase in the appropriation for new schoolhouses. This advanced from \$77,628 in 1882 to \$260,978 in 1883 and \$476,173 in 1884. These expenditures were made necessary by

¹ *Mayor's Inaugural* (1876), pp. 22, 23.

² *Ibid.* (1878), p. 33.

³ *Ibid.* (1880), p. 31.

⁴ Stackpole, *School Expenditure of City*.

⁵ *Mayor's Inaugural* (1881), p. 36.

the growth of population in the southern wards of the city.¹ The last two years of the period the expenditure for new houses declined to \$333,555 and \$133,608, respectively. The amount paid for instruction advanced very gradually during the last years of the period. The passage of the free text-book law in the spring of 1884 required a considerable increase in the appropriation for books and supplies.² In 1883 the first appropriation was made for instruction in the mechanic arts for boys in the grammar school.³

Water. The expenditure for water constituted 15.2 per cent of the total expenditures of the city in the years 1883 to 1886, practically the same percentage demanded in the period 1868 to 1871. The per capita charge had fallen in the meantime from \$6.17 to \$5.02.

At the end of the last period Boston was considering the advisability of taking the waters of Sudbury River, in accordance with the provisions of chapter 177 of 1872. The project received the support of Mayor Cobb in his inaugural of 1874. He pointed out the urgent need of a larger supply and stated that the ablest hydraulic engineers had decided upon the Sudbury as the most available source. The Mayor estimated the cost of the undertaking at not over \$8,000,000, including all damages.⁴ During the dry season of 1874 the city made a temporary connection with the Mystic waterworks. It was soon found, however, that sufficient water could not be spared from this system, and on January 2, 1875 the city council authorized the water board to take the waters of the Sudbury River and bring them by a separate conduit to the Chestnut Hill Reservoir.⁵

Construction began in 1875. In 1876 the task was, on recommendation of the mayor, entrusted to a new water board, consisting of three persons appointed by the mayor with the consent of the city council.⁶ The legislative act, which authorized the change, provided for the abolition of both the Cochituate and the

¹ *City Documents*, no. 173 (1884), p. 27.

² *Mayor's Inaugural* (1885), p. 49.

³ *Ibid.* (1884), p. 20.

⁴ *Mayor's Inaugural* (1874), pp. 17, 18.

⁵ *Memorial History*, iii, p. 280.

⁶ *Ibid.*, p. 285.

Mystic boards and the consolidation of the management of the entire system in the single board.¹ The work was completed in 1878 at a cost of \$5,000,000, a sum considerably below the estimate. The existing depression permitted the making of very favorable contracts.²

For a very few years Boston enjoyed immunity from the fear of a water famine. In 1880, however, the board recommended the building of another storage reservoir. The original plans of the new system had contemplated the construction from time to time of seven storage reservoirs. Three were constructed at the start. The daily consumption of water had risen from 15,000,000 gallons in 1872 to 26,000,000 in 1880, a rise due to the growth of population and to continued waste.³ In 1883 construction was once more taken up, as the rise in expenditures shows. The use of the water was greatly economized in the same year by the enforcement of a very strict system of inspection,⁴ the board being able to reduce the per capita consumption from 90 to 70 gallons.⁵

County of Suffolk. County expenditures fell steadily from \$372,321 in 1874 to \$296,140 in 1879. From that point they rose, as steadily as they had fallen, to \$393,785 in 1884. The cost of constructing a new court house, an expenditure formerly charged to public buildings, carried the county expenditure to \$852,613 in 1885 and \$999,056 in 1886. In the period 1883 to 1886 the county demanded 5 per cent of the total expenditures; the per capita charge was \$1.67.

With the beginning of the fiscal year 1879 all county expenditures were paid on drafts of the mayor, after being allowed by the auditor, who was constituted auditor of Suffolk County by chapter 256 of that year.⁶ The city had finally secured the right to audit all claims of the county.

The question of building a new court house had been agitated for many years. Authority was obtained from the legislature as

¹ *Acts*, 1875, ch. 80; *Mayor's Inaugural* (1876), p. 18.

² *Memorial History*, iii, p. 280.

³ *Mayor's Inaugural* (1881), p. 23.

⁴ *Ibid.* (1884), p. 14.

⁵ *City Documents*, no. 27 (1887), p. 8.

⁶ *Auditor's Report* (1879), p. 226.

early as 1867 to take as much land as the aldermen might deem necessary for the purpose, but the aldermen were never able to agree upon a site. The depression with which the period began also contributed to the postponement of definite action. In his inaugural of 1880 Mayor Prince urged that the city take advantage of the prevailing low price of land and purchase a site at once, delaying construction until later.¹ Chapter 128 of 1880 brought matters to a head by requiring that, in case the aldermen should not have selected a site before December first of that year, the supreme court was to appoint commissioners to make the selection. The aldermen straightway selected a lot belonging to the city on Beacon Hill known as the "Reservoir lot."²

Nothing definite was done, however, until March, 1885, when commissioners were appointed under order of the city council. They secured power the following June, under chapter 377 of 1885, to take land with the approval of the mayor and to erect a court house. They decided in favor of Pemberton Square. The necessary estates were taken on August third, and a loan of \$850,000 was issued to pay for them.³

RECEIPTS

The period 1874 to 1886 met all its expenditures without recourse to loans. The course of the city's receipts followed very closely the movement of expenditures. Thus, in the first years of retrenchment the total receipts of the city fell from \$16,004,981 in 1874 to \$10,839,102 in 1879. Renewed activity demanded larger receipts in the succeeding years. The receipts accordingly rose to \$15,435,489 in 1884. The last two years of the period show the effect of the business depression both upon expenditures and receipts. The latter were \$13,006,060 in 1885 and \$13,527,117 in 1886.

Taxes. In the period 1883 to 1886 taxes made up 74.8 per cent of the total receipts. Receipts fell from \$12,176,436 in 1874 to \$8,046,237 in 1879, and then in 1880 rose to \$10,122,664, a level fairly well maintained throughout the rest of the period. In 1885

¹ *Mayor's Inaugural* (1880), p. 16.

² *Ibid.* (1881), p. 21.

³ *Ibid.* (1886), pp. 31-33; *City Documents*, no. 114 (1885).

taxes brought in \$9,592,539, but slightly more than they had contributed in 1870. Meanwhile the population of the city had grown from 250,000 to 390,000, making possible a reduction in the per capita burden from about \$36 to \$24. As in the preceding period the tax system consisted of the general property, the poll, the corporation, and the bank tax, with the addition of a tax upon ships engaged in foreign trade. In 1886 the total receipts of \$9,730,597 came from these sources; general property, \$8,773,931; poll, \$111,949; corporation, \$626,221; bank tax (retained by city), \$187,069; bank tax (from state), \$22,003; ships engaged in foreign trade, \$9,422.

The administration of 1874 started out with the intention of making a retrenchment in expenditures and also of meeting them without recourse to loans. This course was followed, on the whole, throughout the period. In order to meet the expenditures of 1874, which were still very large, the city council raised the tax rate to \$15.60, the highest rate imposed since 1865. This rate was based on a valuation of \$798,755,000, \$105,000,000 greater than that of 1873. Of this increase \$72,000,000 was due to the annexations of Charlestown, West Roxbury and Brighton. As a result, the receipts for the year were \$12,176,436, a figure not reached again until 1892.¹

Such a rate was too high for a period of depression, and in 1875 the tax rate was lowered to \$13.70, bringing in \$11,184,653. By 1876 the city council had succeeded so well in reducing expenditures that a still further reduction in the tax rate was possible without recourse to loans. The rate for 1876 was \$12.70, and the receipts from taxation, \$9,964,080. At this point the fall in the valuation of assessable property, resulting from the depression, made further reduction in the tax rate out of the question.

In the years of depression succeeding 1873 the market value of real property was far below the figure on the assessment rolls. Gradually, however, in response to vigorous demands for abatement, the valuation of assessable property was reduced. This process of revaluation began in 1875, and extended to 1879. In 1875 the reduction was \$5,000,000; in 1876, \$45,000,000; in

¹ The figures given in this chapter include the tax receipts from all sources.

1877, \$62,000,000; in 1878, \$56,000,000; and in 1879, \$17,000,000. In the five year period 1874 to 1879 the valuation had fallen from \$798,755,000 to \$613,322,000, a reduction of \$185,000,000, or 23 per cent. Not until 1890 did the valuation figures go beyond the record of 1874. Owners of real estate suffered greatly during the early part of the period. It is said that large numbers of dwelling houses and stores were untenanted and that rents in many cases fell so low as to leave the landlord little beyond his taxes.¹ It was only natural that the taxpayers should have demanded severe retrenchment during these years.

The rates of taxation imposed in 1877, 1878 and 1879 were \$13.10, \$12.80 and \$12.50, respectively. By holding firmly to its retrenchment policy the city council was able to meet expenditures without raising the tax rate or resorting to loans.

With 1880 prospects brightened, and the government felt justified in making more liberal appropriations. The tax rate was advanced to \$15.20, yielding a return of \$10,122,664. During the next four years it was maintained at practically this level, being \$13.90, \$15.10, \$14.50 and \$17 in the years 1881, 1882, 1883 and 1884, respectively. The practice of meeting all expenditures from ordinary receipts finally led to the enactment in 1885 of legislation limiting the tax rate.

In 1880, the valuation began to move upward, rising from \$613,322,000 to \$639,462,000 in that year. The return to its old level was, however, very slow. In 1881 it was \$665,554,000; in 1882, \$672,497,000 and in 1883, \$682,432,000. The depression of 1884 prevented any gain that year. In 1885 it was only \$685,579,000, and in 1886, \$710,621,000. The rise from 1880 onward was due to an increase in the valuation of real estate alone. Personal property rose at first, and then fell back gradually to the level of 1878 and 1879. This decline can be attributed to the reluctance of holders of personal property to make declarations, when the tax rate was rising to a new level. In the following table the course of the valuation of both real and personal property is shown. The tax rates for the respective years have been placed beside the column of personal property, to make clearer

¹ *Mayor's Inaugural* (1877), p. 32.

the connection between a rising tax rate and a falling valuation of personalty. The valuation figures are in millions of dollars.

Year	Total	Real	Personal	Tax Rate	Proportion of Personal
1874	798	554	244	15.60	30 %
1875	793	558	235	13.70	29 %
1876	748	526	222	12.70	29 %
1877	686	481	205	13.10	29 %
1878	630	440	190	12.80	30 %
1879	613	428	184	12.50	30 %
1880	639	437	202	15.20	31 %
1881	665	455	210	13.90	31 %
1882	672	467	204	15.10	30 %
1883	682	478	204	14.50	29 %
1884	682	488	194	17.00	28 %
1885	685	495	189	12.80	27 %
1886	710	517	193	12.70	27 %

The proportion which personal property constituted of the total valuation has also been given. This fell from 30 per cent in 1874 to 27 per cent in 1886. The act of 1881, preventing double taxation in the case of mortgaged real estate, was held responsible for the fall in 1882 from \$210,000,000 to \$204,000,000.¹

The higher tax rates of the early eighties and the indications of a new upward movement in expenditures gave support to the demand for a limit upon the city's appropriations. In 1880 a proposition that the tax rate should not exceed \$13 was made to the city council, but did not meet with favor.² In his inaugural of 1885 Mayor O'Brien gave considerable attention to the subject. He believed that the city should petition the legislature for the passage of an act limiting the tax rate to \$15. This legislation, he thought, would be complementary to the very beneficial act limiting municipal indebtedness. Inasmuch as the city had subsisted on a rate averaging \$14 during the last decade, he believed that \$15 would be ample to carry on the legitimate business of the city. The placing of such a limit would, in the opinion of the Mayor, give the much-needed assurance to the citizens, upon which business prosperity depended.³

¹ *Auditor's Report* (1882), p. 308.

² *City Documents*, no. 147 (1880).

³ *Mayor's Inaugural* (1885), pp. 14, 15.

The legislature of 1885 took the matter into its own hands, being much concerned over the very large appropriations of 1884. Chapter 178 of 1885 required that the amount raised in any year from taxes should not exceed, exclusive of the sum needed for the state tax and the debt appropriation, \$9 on every \$1,000 of the average valuation of taxable property for the preceding five years. The act was to take effect on its passage, April 17, 1885.

The rate of 1885 was accordingly fixed at \$12.80, all above \$9 being for the state tax and city debt. The limit of \$9 was at least \$2 lower than that recommended by the Mayor, and \$3 lower than that allowed other cities in the commonwealth by chapter 312 of the same year. The discrimination was carried still farther, inasmuch as other cities did not have to reckon the county tax inside the limit.¹ The task of reducing the appropriations of Boston to conformity with the \$9 rate seemed almost impossible. The committee on appropriations for 1886 stated that it would be necessary to make a uniform reduction of 10 per cent in every appropriation over which the council exercised any control. It believed that this could not be done without seriously crippling every department of the city government. A limit of \$10 or \$10.50 was, in the opinion of the committee, the lowest that would give the citizens of Boston the public benefits they had been accustomed to demand.²

Expenditures were cut down in 1885 and 1886 wherever possible and the ordinary business carried on without resort to loans. Mayor O'Brien in his inaugurals of 1886 and 1887 expressed satisfaction with the results of the law. He believed the work of the city could be done within the limit, and deemed the measure a safeguard that would keep the finances of Boston in excellent condition, and check wasteful expenditure.³ In 1887 the Mayor said with regard to the charter réform and the tax law that "with the checks of the City Charter in the hands of a vigilant Mayor, that will enable him to prevent waste and extravagance, and the law limiting taxation, the rapid increase of municipal taxation,

¹ *Mayor's Inaugural* (1886), p. 14.

² *City Documents*, no. 71 (1886).

³ *Mayor's Inaugural* (1886), p. 15.

that has become so alarming throughout the country, has been stopped so far as Boston is concerned.”¹ It must be remembered that the law of 1885 was passed in a period when the city council was accustomed to appropriate money for only the most necessary objects. The coming of a period of prosperity was needed to test the efficiency of the new measure.

The state tax declined during this period, owing to the policy of retrenchment which ruled in state as well as municipal expenditures.² The city's share fell from \$802,120 in 1874 to \$206,370 in 1879. The levy of \$500,000 in 1879 was too small for the needs of the commonwealth. The tax for 1880 was accordingly placed at \$1,500,000, this figure being maintained on the whole during the remainder of the period.³ The city's proportion of the state tax was raised in 1874 by the annexations from 36 per cent to 40 per cent. At this figure it remained until 1876 when it rose to 41 per cent. In 1883 it fell to 38.5 per cent and in 1886 to 37 per cent. In 1886 the state tax demanded \$555,870, or about \$0.72 of a tax rate of \$12.70.

The poll tax was fixed at \$2 throughout the period. This was the maximum possible unless highway taxes were separately assessed. Even this exception was removed in 1879 by chapter 299, which established a limit of \$2, by providing that local assessors were to assess the state tax up to \$1 upon polls and the balance upon property and the county tax, likewise, up to \$1 upon polls with the balance upon property. This provision has led to a uniform poll tax of \$2, practically throughout the state. In the case of Chelsea, Revere and Winthrop, whose county taxes are paid by Boston, it resulted in a poll tax of only \$1.

In 1883 Mayor Palmer recommended petitioning the legislature for the repeal of the law which made the payment of a poll tax a qualification for voting. He pointed out the injustice and inexpediency of a law which essentially established a property qualification for voting and led to the payment of poll taxes from campaign funds.⁴ It was not until 1891 that the desired reform was secured.

¹ *Mayor's Inaugural* (1887), p. 21.

² Bullock, *Finances of Massachusetts*, ch. vi.

³ *Ibid.*, p. 90. ⁴ *Mayor's Inaugural* (1883), pp. 7-9.

From figures collected at this time we get some idea of the adequacy of the poll tax as a revenue producer. Of the total tax levy of 1877, there was outstanding on May 1, 1879 \$97,000. Of this sum, \$72,000 was due from polls, or 40 per cent of the amount assessed in poll taxes for that year.¹ The receipt of even so small a proportion as 60 per cent was largely due to the enforcement of the voting qualification. From 1822 to 1883 Boston accumulated poll tax bills, practically all uncollectible, amounting to \$1,593,000.²

The city's share of the corporation tax was \$354,909 in 1874. The business depression reduced the receipts to \$266,689 in 1877. In 1880 there came a sudden increase from \$274,596 to \$444,996. The period closed with the receipt of \$626,221 from the corporation tax, about six per cent of the total tax receipts of Boston.

The amount retained by Boston on account of the holdings of her citizens in her own national banks was fairly constant throughout the period. In 1886 this amounted to \$187,069. In the same year Boston received \$22,003 from the state on account of shares held by her citizens in banks elsewhere in Massachusetts.

By the provisions of chapter 284 of 1881 ships engaged in foreign commerce were no longer to be taxed on their property value, but on their net yearly income paid out in dividends. As this new method meant a smaller tax income, the state agreed for a period of five years to reimburse the towns and cities. Boston received, from 1882 on, a small credit from the state, varying in this period from seven to sixteen thousand dollars. The section providing for reimbursement was extended from time to time until 1902, when chapter 374 introduced a new system. Corporations owning such property were to pay the state a tax of one-third of one per cent on the market value, of their stock, after deducting the value of the ships.³ Local assessors were to impose a tax of one-third of one per cent upon the interests of persons and partnerships in similar property.³

¹ *Auditor's Report* (1878), p. 8.

² *Ibid.* (1883), p. 12.

³ *Massachusetts Public Documents*, no. 16 (1903), pp. 14, 15.

The charter of 1885 transferred the appointment of the principal assessors to the mayor subject to approval by the board of aldermen, and gave over to the principal assessors the appointment of the assistant assessors.¹ In 1880 the term of the principal assessors was changed from one to three years.² After the readjustment of the assessment of real estate during the latter seventies complaints as to overvaluation and inequality became fewer.³

Rents. The receipts from rents reached their highest point in 1874, when \$200,511 was received from this source. At this time the city held temporarily a considerable amount of real estate acquired in the course of the great street improvements. The sale of this property and the decline in individual rents due to the depression brought the receipts to only \$108,059 in 1881. From 1874 to 1881 the receipts from the markets fell from \$106,000 to \$85,000, and those from the old State House, from \$21,000 to \$8,000. The city as well as private landlords suffered from the fall in real estate values. After 1881 receipts from rents increased somewhat, amounting to \$118,398 in 1886. In the period 1883 to 1886 this branch contributed but 0.8 per cent of the total receipts of the city.

Interest. In the period 1883 to 1886 interest made up 1.4 per cent of the total receipts. Interest on bank deposits contributed the greatest amount during this period, the return from bonds and notes having fallen to a very low figure with the decline in land sales. The extraordinary figure of \$332,619 for 1883 was due to \$186,000 premium on loans.

Licenses. The return from licenses increased from \$25,431 in 1874 to \$42,906 in 1886. The whole of this advance came after 1879. Licenses contributed but a very small part of the total receipts, only 0.3 per cent in the years 1883 to 1886. Practically the same objects were subject to licensing as in the preceding period.

Liquor Licenses. In 1875 a new source of receipts was opened to Boston in fees from liquor licenses. Chapter 99 of 1875

¹ Ernst, *Constitutional History*, p. 127.

² *City Documents*, no. 146 (1880), p. 7.

³ *Mayor's Inaugural* (1885), p. 13.

allowed the licensing of shops for the sale of liquor at a low scale of charges, the state to receive one-fourth the receipts.¹ The receipts from license charges were \$250,478 in 1875. At this level they remained until 1883 when they rose to \$305,551. In 1884 the amount suddenly advanced to \$521,178 and in 1886 to \$977,247. Receipts from liquor licenses were rapidly becoming of considerable importance to the finances of the city. In the period 1883 to 1886 they made up 4.1 per cent of the total receipts.

Special Assessments. The receipts from special assessments were of great importance during the first four years of the period, being derived largely from betterments levied in the course of the great land and street improvements of the preceding period. In the years 1874 to 1877 the average annual receipts from this source were \$594,652. The postponement of further improvements until better times is responsible for the decrease after 1877. In 1880 receipts had fallen to \$125,364. From that point, however, they increased again with the levying of the park betterments, averaging \$205,777 for the last four years of the period. At this time receipts from special assessments made up 1.4 per cent of the total receipts of the city.

During this period the city received assessments from an entirely new source. Chapter 185 of 1875, which established the park commission, authorized this body to levy assessments upon land receiving a special benefit from the laying out of the parks. The commissioners levied an assessment of \$431,000 in 1879 on lands benefited by the establishment of the Back Bay Park, an amount practically equivalent to the cost of the land. In 1885 betterments amounting to \$126,000 were levied by the commissioners for Franklin Park, and \$22,000, for Marine Park. The increase in the valuation of land near the Back Bay Park was far greater than the amount assessed. The land affected by this improvement advanced from \$11,000,000 in 1877 to \$16,000,000 in 1880, a period when the total valuation of the city was rapidly declining.²

¹ Bullock, *Finances of Mass.*, p. 88.

² *City Documents*, no. 12 (1881), p. 8.

The city's experience with the special assessment was never satisfactory. The original assessments, often much too low, were frequently abated to a considerable degree, and the actual collection was often delayed or entirely neglected. Property owners made frequent use of the right of petition for a jury trial. Inasmuch as juries generally reduced the assessment, it was only natural that the city should prefer to make a very low assessment in the first place. From 1867 to 1886 special assessments approximating \$7,700,000 were imposed. During this same period the collections amounted to about \$6,200,000. The greater part of the \$1,500,000 outstanding in 1886 was probably never collected.

Health. The receipts from the health department in the period 1883 to 1886 brought in an average return of \$58,448, or 0.4 per cent of the city's receipts. At this time they contributed 10 per cent toward expenditure for the public health.

Institutions. The receipts from the institutions fell off considerably during the early years of depression. In 1878, however, the introduction of stone cutting on Deer and Rainsford Islands, and the finding of more remunerative work for men and women in the house of correction, raised the receipts from \$170,640 to \$197,814. In the years 1883 to 1886 receipts from the institutions averaged \$229,394, or 1.6 per cent of the total city receipts. At this time the proportion of the expenditures met by receipts was 20 per cent.

The table on the next page shows the course of the receipts for the more important branches of the department. The figures are in thousands of dollars.

The house of correction, which in the early seventies had been self-supporting, continued in the first part of this period the decline begun in 1873. The hard times made laborers jealous of even the small amount produced in the city institutions. In 1875 a committee of the city council was appointed to consider "whether the present mode of employing criminals in city institutions has the effect of reducing wages of workmen, or deprives them of employment." The committee did not answer this question, simply reporting that all authority over the method of

Year	Correction	Industry	Overseers	Hospital	Soldiers
1874	44	13	29	3	90
1875	29	13	29	1	86
1876	26	11	32	5	81
1877	26	9	28	12	84
1878	43	25	29	8	79
1879	47	16	24	10	109
1880	51	24	18	12	81
1881	52	39	15	14	78
1882	57	59	24	13	80
1883	61	40	20	13	83
1884	56	50	24	19	80
1885	56	41	22	35	75
1886	26	44	16	34	78

employment was vested in the board of directors. The receipts of the house of correction fell as low as \$26,000 in 1877. The next year, however, more remunerative work was secured and by 1879 all the inmates were fully employed.¹ The receipts rose to \$43,000 in 1878 and \$61,000 in 1883. The last year of the period they declined suddenly from \$56,000 to \$26,000.

The introduction of stone cutting in 1878 brought in much larger receipts from the house of industry. From 1881 onward receipts were obtained from the sale of the products of Austin Farm in West Roxbury; \$8,000 was received in 1886. During this period the receipts from the city hospital became important. Receipts for board rose from \$3,000 in 1874 to \$34,000 in 1886.

Water. The receipts from the water department increased from \$1,298,380 in 1874 to \$1,579,578 in 1886. In the period 1883 to 1886 they made up 10.9 per cent of the total receipts of the city. But for reductions in the water rates, the receipts of the department would have been much greater.

In the following table the expenditures, the receipts, and the excess of expenditures have been placed side by side. The figures are in thousands of dollars.

¹ *Mayor's Inaugural* (1880), p. 43.

Year	Expenditures	Receipts	Excess of Expenditures
1874	1,944	1,298	646
1875	2,687	1,397	1,290
1876	3,358	1,389	1,969
1877	2,641	1,358	1,283
1878	1,984	1,349	635
1879	1,587	1,374	213
1880	1,667	1,365	302
1881	1,472	1,373	99
1882	1,592	1,426	166
1883	1,771	1,498	273
1884	2,001	1,494	507
1885	1,955	1,549	406
1886	2,110	1,579	531

Receipts were approaching expenditures toward the end of the preceding period. A surplus might even have been obtained soon after the opening of the new period but for the great cost of the Sudbury system. But even before the Sudbury undertaking was completed the city council had determined on a reduction in the water rates. The smaller receipts for 1877 were due to a reduction of 16 $\frac{2}{3}$ per cent in the meter rates.¹ This reduction marks the end of a consistent policy. Down to 1877 the city government had tried conscientiously to make the system self-supporting. Its failure was probably due to the great waste of water which had made frequent extensions necessary. It is curious that the movement for reduction should have met with success in a period of depression, for lower water rates meant higher taxes.

In 1879 a further reduction of 20 per cent was made in the meter rates.² These reductions kept the receipts of the department stationary from 1877 until 1882. The fall in expenditures, meanwhile, diminished the amount of the deficit to only \$99,000 in 1881. The maintenance of the old rates would have given the department a good sized surplus in that year.

In 1882, no further material reductions being made, receipts began to rise. But at just this time the need of extensions caused an even greater advance in expenditures. Besides, the city council would not allow a marked increase in receipts. In

¹ *City Documents*, no. 220 (1894), p. 150.

² *Ibid.*

1886 the meter rates were reduced over 10 per cent, and a rebate was given in dwelling house rates, equal to a decrease of 10 per cent.¹ The movement for low water rates went so far even as to find considerable support for the abolition of all charges and the maintenance of the system entirely from the proceeds of taxation.

Ferries. The receipts from the city ferries decreased during this period from \$200,000 to \$164,497. In the years 1883 to 1886 they constituted 1.1 per cent of the total receipts of the city. The decline in receipts was due to repeated reductions of the tolls, and would have been still more marked but for a considerable increase in business.

The following table gives the ordinary expenditures and receipts of the ferries from 1874 to 1886. The figures are in thousands of dollars.

Year	Expenditures	Receipts	Deficit	Surplus
1874	220	200	20	..
1875	208	179	29	..
1876	169	172	..	3
1877	162	175	..	13
1878	164	166	..	2
1879	154	174	..	20
1880	168	166	2	..
1881	179	165	14	..
1882	200	162	38	..
1883	242	159	83	..
1884	234	156	78	..
1885	230	159	71	..
1886	189	164	25	..

The rates established by the city council of 1870 remained in force until 1879. During this ten-year period they were sufficiently high to meet practically all the ordinary expenditures. But for the depression, which materially reduced business after 1874, a still more favorable showing would have been made.²

The movement for reduction in the rates of toll dates from the very beginning of municipal management. The unsuccessful attempt to lower rates at the end of the last period will be recalled. During this period the movement was strongest in 1877, the same

¹ *City Documents*, no. 220 (1894), pp. 150, 151.

² *Ibid.*, no. 65 (1875), p. 3.

year in which the city council voted for reduction in the water rates. In that year, on the unanimous recommendation of the joint standing committee,¹ an order establishing free ferries passed the board of aldermen without a dissenting vote and the common council by a large majority.² The measure was approved by the mayor and would have taken effect on January 1, 1878, had it not been declared illegal by the supreme court. By establishing a toll ferry, the city had already exhausted, in the opinion of the court, the option allowed in the ferry act of 1869.³

Unsuccessful in its attempt to secure free ferries, the city council began to reduce tolls. In 1878 a committee found that the receipts were exceeding expenditures, and recommended a decrease of about 20 per cent in the rates of toll.⁴ On January 1, 1879 a reduction of from 20 per cent to 25 per cent was made in the charges for teams; foot passengers were allowed to purchase 16 tickets for \$0.25 in place of the former flat rate of \$0.02. Later in the year 50 tickets were sold for \$0.50. Further reductions took place in 1880 and 1881. Meanwhile the mayor and aldermen had applied to the legislature for free ferries. This plan was defeated by the very vigorous opposition of taxpayers.

The firm adherence of the city council to the policy of reduction is reflected in the decline of receipts in spite of increasing business. In 1883 the deficit rose to \$83,000. Down to the end of the period the ferries had cost Boston \$4,448,000, and had brought her a return of \$2,995,000.⁵

Sales of Property. The receipts from sales of property declined considerably during this period. Whereas they had made up 3.8 per cent of the total city receipts in the years 1868 to 1871, they constituted but 1.4 per cent for the period 1883 to 1886. Boston sold practically all that remained of her public land early in the period. After 1875 the receipts were derived largely from the sale of miscellaneous pieces of real estate, which had been acquired in the course of the street improvements, or were no longer needed for public purposes.

¹ *City Documents*, no. 64 (1877).

² *Ibid.*, no. 220 (1894), p. 156.

³ *Ibid.*, no. 107 (1877), p. 5.

⁴ *Ibid.*, no. 86 (1878).

⁵ *Auditor's Report* (1886), p. 288.

Inasmuch as the public lands of the city were practically all sold before the end of the period, we are now in a position to judge the financial success of this municipal venture. In his valedictory of 1894 Mayor Matthews gives the following figures which show the results of the various sales.¹ The figures are in thousands of dollars, and cover the period 1822 to January 3, 1894.

	Expenditure	Receipts	Profit	Loss
Neck lands	\$418	\$3,298	\$2,879	..
South Bay	1,202	506	....	\$695
South Boston	22	323	300	..
Mill Pond .....	...	135	135	..
Miscellaneous	363	770	407	..
Total	\$2,005	\$5,032	\$3,721	\$695
Net profit	3,026			

All the lands in the above table were sold with a direct fiscal purpose. In the following table will be found the expenditures and receipts of improvements, in which the fiscal motive was subsidiary to that of public health.

	Expenditures	Receipts	Loss
Back Bay	\$1,029	\$179	\$849
Church Street	1,183	222	960
Northampton Street	561	172	389
Suffolk Street	2,428	863	1,565
Roxbury Canal	372	98	274
Total	\$5,573	\$1,534	\$4,037

The first class of land ventures resulted in a net profit of \$3,026,000; the second cost the city \$4,037,000. With the exception of the South Bay improvement, which resulted in a loss of \$695,000, the city was fortunate in the outcome of the first class of ventures. It had succeeded in providing homes at reasonable prices for many of its citizens and at the same time had derived considerable revenue.

County of Suffolk. The receipts of the County of Suffolk followed very closely the changes in business conditions. They declined from \$133,912 in 1874 to \$62,842 in 1880, and then rose again to \$125,202 in 1886. County receipts declined in relative importance from 1.1 per cent of the total city receipts in the years 1868 to 1871 to 0.7 per cent in the period 1883 to 1886.

¹ *City Documents*, no. 220 (1894), p. 243.

DEBT

The net debt of Boston was practically stationary throughout the period, falling slightly from \$27,719,000 on April 30, 1874 to \$26,487,000 on April 30, 1887. The growth of population had meanwhile reduced the per capita burden from about \$100 to \$65. The interest charge had fallen slightly from \$2,279,000 in 1873 to \$2,262,000 in 1886.¹ The decline in total expenditures accounts for the slight increase in the relative importance of the interest payments, which added about 15 per cent to expenditures, exclusive of the state tax, in 1873, and about 18 per cent in 1886.

At the very start, the city council determined to meet all expenditures without recourse to loans. The tax rate for 1874 was placed at \$15.60, and the year closed with a reduction of \$426,000 in the city debt. A severe depression had meanwhile brought an unprecedented fall in real estate values. Consequently, the city government did not feel justified in maintaining the very high rate of 1874. The \$13.70 levied in 1875 was sufficient, however, to permit a reduction in the debt of \$241,000. At this time it looked as though the next few years were to see a material decrease in the debt. In his inaugural of 1876 Mayor Cobb said: "I am not without hope, which seems to me not altogether chimerical, that the policy of paying as we go may be so strictly adhered to, that the entire debt may be virtually extinguished in a few years." He condemned the liberal use of the city's credit as an inducement to waste, extravagance and even corruption. "It would be difficult to hoodwink and cheat a people," the Mayor concluded, "when the amount of the plunder has got to be paid by them in the very next tax bill, instead of being hidden amid the confusion, easily made inextricable, of an extensive book-keeping and a tangled computation of loans, payments, sinking funds and interest accounts."²

¹ To get the entire amount paid for interest, the interest on the water loans, which is included in 1873 and 1886 under expenditures for water, and interest on the county debt, which appears in 1886 under county expenditures, have been added to the payment of interest on the city debt proper.

² *Mayor's Inaugural* (1876), pp. 10-13.

The extraordinary growth of municipal debts caused the legislature of 1875 to pass chapter 209, which imposed a limit upon the borrowing power of cities. No municipal debt was to exceed 3 per cent of the average valuation of the preceding five years, unless the debt was already not less than 2 per cent, in which case 1 per cent might be added to its amount. The debt of Boston already exceeded 2 per cent, making her additional borrowing capacity 1 per cent or \$7,939,618. Within this limit loans might be contracted for any object. The act stipulated that all debts must be repaid in ten years except those for general sewerage purposes which might run twenty years. The water debt might be contracted for thirty years, and was placed outside the limit of municipal indebtedness.¹ The act of 1875 continued the sinking fund commissioners in power with the exception that the city treasurer was not permitted to serve on the board. The law made but little change in the sinking fund system. Ten-year loans now required an annual appropriation equal to 8 per cent, twenty-year loans, $3\frac{1}{2}$ per cent and thirty year, 2 per cent.²

The only loans made in 1874 and 1875 were for the completion of the great street improvements and the extension of the water system. These additions to the gross debt were more than offset, however, by the payments into the sinking funds.

The continuance of the depression induced the city council to lower the tax rate of 1876 to \$12.70. It sought to maintain the policy of meeting all expenditures from taxes, however, by making large reductions in municipal expenditures. But the rate was inadequate, even with expenditures on a lower level; and an addition of \$428,000 was made to the debt in that year. In 1877 the rate was raised to \$13.10, and retrenchment carried still further. As a result the city was able to diminish the net debt by \$1,321,000. During this year the water debt and the funds for its redemption were transferred to the management of the sinking fund commissioners.³

¹ *Auditor's Report* (1875), pp. 9, 10.

² *Statutes and Ordinances* (1876), p. 320.

³ Ernst, *Constitutional History*, p. 144.

The sinking fund ordinance of 1870 had provided that the balance in the treasury should be turned over to the commissioners. In case this should be insufficient to provide for the amortisation of the debt at maturity, the commissioners were given power to raise the residue by taxes. As a matter of fact, this balance was more than sufficient to meet the requirements of the sinking fund. Consequently, in its search for possible savings during these years of depression, it was only natural that the city council should have found in the annual assignment to the sinking fund an opportunity for retrenchment. By ordinances passed in the fiscal year 1876-77 the council stipulated that the annual balance should no longer belong to the commissioners, but that they should raise by taxation the amount needed for the funds. This measure resulted in a reduction of the receipts of the funds from \$2,975,000 in 1875 to \$1,920,000 in 1876. The receipts remained at about \$2,000,000 during the rest of the period. The annual appropriation from the tax levy varied from \$500,000 to \$700,000. The sinking fund ordinance of 1870 had checked the forces that would have rapidly repaid the debt; the ordinance of 1877 made even more difficult its ultimate extinction.¹

In 1879 Mayor Prince declared that the reduction in the receipts of the sinking funds had not gone far enough. All receipts from betterments, bonds and notes, and sales of real estate still passed to the credit of the commissioners. He believed that this should be left in the treasury for general purposes and only the bare requirement be supplied from taxes. The Mayor considered it very bad policy to pay the debts faster than provided by law, stating that this course led to unnecessary taxation and municipal extravagance.² The change was not made, however.

The tax rate for 1878 was placed at \$12.80. Though expenditures were greatly reduced, the decreasing valuation caused a large fall in receipts. The year ended with the addition of \$70,000 to the net debt. In his inaugural of 1878 Mayor Pierce referred to the debts of municipalities contracted during and since the War as a "source of much anxiety, not only to property-

¹ *City Documents*, no. 31 (1877).

² *Mayor's Inaugural* (1879), p. 19.

holders, but to all men who are interested in the prosperity of Republican institutions.”¹

The next year saw the lowest rate of the period — \$12.50. As a result of the decreased receipts, \$1,613,000 was added to the debt. At the end of this year the net debt amounted to \$27,842,000, or about \$1,000,000 more than at the time the debt limit was imposed. Owing to the decreasing valuation the borrowing capacity greatly diminished. It was now only \$1,000,000. At this time the question of the new court house was before the council. It was suggested that the city apply to the legislature for the right to contract a loan for this purpose in excess of the limit. Mayor Prince was unwilling to recommend such action, however.² During 1879 loans to the amount of \$3,483,000 were issued, the principal items being \$1,095,000 for street improvements, \$1,433,000 for sewers and \$630,000 for the water system.

The revival in business conditions allowed a higher tax rate in 1880. It was placed at \$15.20, and brought in receipts sufficient to reduce the debt by \$1,837,000. A rate of \$13.90 in 1881 allowed the repayment of \$1,744,000 more. At this time the net debt stood at \$24,261,000, the lowest point reached during this period. The rate for 1882 was \$15.10, but expenditures had increased to such an extent that \$597,000 was added to the debt. In 1883 with a rate of \$14.50 the debt increased \$1,486,000. In 1884 the city council determined to meet all expenditures from taxes and accordingly placed the rate at the unprecedented figure of \$17. This brought about a reduction of \$1,748,000. The outcome of this extraordinary tax levy in a year of depression was the legislation of 1885 which limited the tax rate and also placed further restrictions upon the use of the city's credit.

Chapter 185 of 1885 limited the tax rate and provided that the city's limit of indebtedness should be $2\frac{1}{2}$ per cent of the valuation until January 1, 1887, when it should be reduced to two per cent. Boston was thus closely bound. She must henceforth confine her activities to those made possible from the proceeds of a low tax rate.

¹ *Mayor's Inaugural* (1878), p. 5.

² *Ibid.* (1880), pp. 14-16.

The tax rate for 1885 was automatically reduced to \$12.80. Retrenchment in expenditure prevented a large increase in the city debt, however, which rose only \$116,000. The last year of the period increasing expenditures, with the tax rate at \$12.70, resulted in an addition of \$1,775,000 to the net debt. The period closed with the debt at \$26,487,000, only \$1,232,000 less than at the beginning of these years of retrenchment.

The money borrowed during this period was largely for objects of permanent character. Of the \$27,600,000 borrowed, \$8,200,000 was for water, \$7,000,000 for sewers, \$6,400,000 for streets, \$2,800,000 for parks, \$1,800,000 for public buildings and about \$1,400,000 for other purposes. The large amount expended for the introduction of Sudbury water, the expenditure for improved sewerage, and the cost of the parks resulted in no increase in the debt during this period. But these years should have seen a marked reduction in the debt, inasmuch as retrenchment left resources available for that purpose. In 1886 the legislature was forced to moderate the debt restriction by allowing loans for certain purposes outside the limit. A loan of \$2,500,000 was authorized for park construction and one of \$2,500,000 for the new court house.

FINANCIAL POLICY

The financial policy which dominated the period was essentially one of retrenchment. The great rise in expenditures from \$3,500,546 in 1860 to \$17,812,874 in 1873 must be followed by long years of reaction. The greater part of the improvements made in this period of activity were either necessary or very useful. It was natural, however, that with liberal appropriations extravagance should have crept in. Therefore, it was possible in the depression following 1873 to make large reductions in expenditures, not only by postponing improvements, but also by cutting down ordinary expenditures. Although the annexations of 1874 increased the demands upon the city treasury, it was found possible to reduce expenditures from \$17,812,874 in 1873 to \$14,654,954 in 1874 and \$11,793,875 in 1879. While the general movement after this low point was toward higher expenditures, the influence of the policy of retrenchment continued to about

1886. In that year expenditures were \$14,476,863, even less than they were in 1874.

Accompanying this policy of retrenchment, was that of meeting all expenditures from taxes. Unfortunately, it did not go so far as to amortize the debt, which stood in 1886 at essentially the same figure as in 1874. The tax rate varied considerably from year to year, but was on the whole too low.

From 1874 to 1876 Samuel C. Cobb served as mayor. In a time of depression, it was not a difficult matter for him to secure retrenchment. His policy was not one of niggardly economy, however; he strongly urged the construction of the Sudbury water system. The city council of 1874 determined to meet all expenditures from taxes. To do this, a tax rate of \$15.60 was required. A reduction of \$426,000 was made in the debt. In his inaugural of 1875 Mayor Cobb expressed the hope that the new policy would be adhered to, urging upon the council the need of "economizing current expenditure, and limiting appropriations for improvements so as to lighten, as far as possible, the weight of taxation."¹ Again in 1876 he addressed the city council in the following words: "The question for us, therefore, is not what expenditures and enterprises would be desirable, or ornamental, or even useful for the future, but what are indispensable for health, for order, for security, and for the accommodation of such traffic as there is, for maintaining the public property in repair, and keeping the machinery of our vital institutions of education, charity and reform in vigorous operation."²

In order to reduce the burden of taxation the retrenchment in expenditures was accompanied by a lowering of the tax rate. This was placed at \$13.70 in 1875 and \$12.70 in 1876. The latter rate was too low to meet all expenditures without recourse to loans.

In 1877 Frederick O. Prince was mayor. His policy, essentially that of his predecessor, demanded still further retrenchment. The largest reduction of the period was made during this year. This combined with a tax rate of \$13.10 not only met all the expenditures of the city but contributed \$1,321,000 to the amortization of the debt. The great events of the year were the begin-

¹ *Mayor's Inaugural* (1875), p. 12.

² *Ibid.* (1876), p. 5.

ning of the park system and the commencement of work on improved sewerage. A modification of the sinking fund provisions released a large sum for general purposes. The retrenchment policy did not contemplate a material reduction of the debt.

In 1878 Henry L. Pierce was again chosen mayor. In his inaugural he stated that "no new improvements, involving expense, should be entered upon during the present year, unless it is made clear that further delay would injuriously affect the city's interests."¹ Expenditures were still further reduced, permitting a lowering of the tax rate to \$12.80. There was practically no change in the amount of the net debt.

From 1879 to 1881 Frederick O. Prince was again mayor. His administration was largely occupied with the carrying out of improvements previously begun. The first year of his administration expenditures reached the lowest point of the period. The tax rate was lowered to \$12.50, a point never to be reached again. In spite of the reduction in expenditures, it was necessary to make an addition of \$1,613,000 to the net debt. The Mayor was averse to the commencement of any new works before the return of prosperity. He therefore urged the postponement of such undertakings as the erection of a new city hall, court house and library.²

In 1880 there came a revival in business. Private capital was being invested in the development of the city. Consequently, the best interests of the municipality demanded that the city government should no longer hold back. The decline in the valuation of assessable property was now rapidly giving way to an advance. An increase in expenditures was accompanied by a rise in the tax rate to \$15.20. The debt was reduced \$1,837,000 in that year.

In his inaugural of 1881 Mayor Prince pointed out a fact which has great bearing on the finances of Boston. He remarked that her citizens were "disposed to regard many things, which elsewhere are considered municipal luxuries, as municipal necessities." "And yet," he added, "they are unwilling to pay the cost of them."³ This fact, true at least since the time of the

¹ *Mayor's Inaugural* (1878), p. 16.

² *Ibid.* (1879), pp. 9, 10.

³ *Ibid.* (1881), p. 16.

first Mayor Quincy, was very evident during the struggle for retrenchment.

But expenditures did not respond to prosperity as they had in the past. This was probably due to the fact that the improvement was short-lived, being followed in 1884 by further depression. The city had by no means recovered from the crisis of 1873; the debts incurred after the War still burdened the taxpayer. The expenditures of 1881 were practically the same as those of 1880. The growing valuation, however, permitted a lower tax rate — \$13.90, and a reduction of \$1,744,000 was made in the net debt.

The policy of retrenchment pursued during this period probably went too far in view of the high standard demanded by the citizens of Boston. In his farewell address of 1881 the president of the common council stated the situation clearly. "We plan and provide for the present only. Our policy leads to temporary expedients and makeshifts." Moreover, in his opinion, the citizens of Boston demanded the best, a circumstance involving a "cost of government relatively larger than that of other cities where less is wanted."¹

In 1882 came another rise in expenditures, placing them on a level maintained throughout the period. A large part of the advance was caused by expenditures for the park system. The tax rate was placed at \$15.10, but this was insufficient to meet the increase in expenditures, an addition of \$597,000 being made to the debt.

In 1883 a slight increase in expenditures was accompanied by a decline in the tax rate to \$14.50, and \$1,486,000 was added to the debt. Retrenchment was still the main motive of the city government, despite the revival in business. In his inaugural of this year Mayor Albert Palmer spoke of economy as "the imperial word that dominates the hour."²

It would seem from the record tax rate of \$17 imposed in 1884 that the city council was bent not only on meeting all expenditures from taxation but also on reducing the debt. A reduction

¹ *City Documents*, no. 167 (1881), pp. 6, 7.

² *Mayor's Inaugural* (1883), p. 33.

of \$1,748,000 was made in the net debt as a result of this vigorous policy. Further reduction was made impossible by the law of 1885 which limited the tax rate.

The city council of 1885 found that it could not proceed without first cutting down expenditures. The \$9 limit did not even permit the scale of activity maintained in a time of retrenchment. Borrowing offered but little relief on account of the severity of the debt limitation. The city government cut down expenditures as far as it could and also made an addition of \$116,000 to the net debt. The tax rate was fixed at \$12.80.

In 1886 the rate was \$12.70, requiring the addition of \$1,775,000 to the net debt of the city. On the first of January, 1887, when the 2 per cent limit went into operation, Boston exceeded it by \$2,327,000.¹

¹ *Mayor's Inaugural* (1887), p. 23.

CHAPTER VI

THE METROPOLITAN DISTRICTS: THE SUBWAYS.

1887-1908

GOVERNMENT

Although the charter of 1885 established a form of government much superior to the old committee rule, it failed to accomplish much that its framers had expected. This partial failure was due to weaknesses in the act itself and also to circumstances outside of it.

The requirement that the mayor's appointees should be confirmed by the board of aldermen was perhaps the most apparent weakness in the charter. As early as 1888 Mayor O'Brien urged that the mayor be given full power. "If he does not do his duty turn him out," he said.¹ Even though the board of aldermen should use the power of confirmation most conscientiously, the mayor's opportunity to secure executive unity was much lessened. But, when this power was used as a weapon over the heads of departments in the furtherance of selfish schemes, the offices were more likely to be filled by obedient henchmen than by capable officials.

A second weakness in the charter, also working against executive unity, was the failure of the act to name any penalty for interference on the part of the city council or any of its members with the executive branch. The members were explicitly forbidden to take part directly or indirectly "in the employment of labor, the making of contracts, the purchase of materials or supplies, the construction, alteration or repair of any public works, buildings or other property, of the care, custody and management of the same, or in the conduct of any of the executive or administrative business of the city."²

¹ *Mayor's Inaugural* (1888), p. 27.

² *Acts*, 1885, ch. 266, sec. 12.

The extent to which this provision was violated can best be shown by a quotation from the report of the finance commission of 1907. "The city council, being dominated by the spoilsmen, has never been willing to accept the separation of functions intended by the charter amendments of 1885, and has tried by resolutions, orders, ordinances and every other means within its power to negative the law. The ordinances of the city are in many cases inconsistent with the statutes, and therefore illegal; and a large part of the orders, resolutions and debates of the city council are devoted to the letting of contracts, the hiring of labor and other matters with which the members are by law prohibited from interfering . . . Many members spend their time in violating the charter by besieging the heads of departments to employ men, raise salaries, give out contracts, and order goods for the benefit of their political supporters and constituents. If persistent entreaties are insufficient to cause the heads of departments to swerve from their duty, recourse is often had to scurrilous attacks on the floor of the city council which are printed in the daily papers and perpetuated in the official publications of the city."¹

A third defect was the lack of a proper check on the appointments of the mayor. There was no provision which prevented the selection of unsuitable men by an incapable or unscrupulous mayor.

But the failure of the charter of 1885 to give Boston an efficient administration was due even more to conditions outside the charter. The above quotation from the report of the commission reveals the existence in Boston of that class of unprincipled men, who enter municipal politics for what there is in it. Just when these parasites began to make their way into the government of Boston, it is hard to say, but it was probably during the seventies, certainly not before the Civil War. This period, however, saw the development of corruption to such a point that reform could not be hoped for in a single year. This evil, confronting the framers of a new charter, was one that might be somewhat lessened by a better form of government, but could only be removed by the continued watchfulness of the voters.

¹ *Finance Commission*, ii, p. 197.

The task of framing a charter that would make the attainment of good government more certain was admirably performed by the finance commission of 1907. This commission, created by the city council under orders approved January 29, and March 7, 1907, was instructed to "examine into all matters pertaining to the finances of the City." It was to consist of seven citizens of Boston recommended to the mayor for appointment by organizations representing various business or other interests in the city.¹ The names of the seven members of the commission who served, without pay, during the next year and a half are Nathan Matthews, chairman, Randall G. Morris, George U. Crocker, George A. O. Ernst, John F. Kennedy, John F. Moors and John A. Sullivan.

The rather doubtful powers, conferred by the city council upon the commission, were much increased by chapter 481 of 1907, which invested it "with authority to summon witnesses and enforce their attendance, to order the production of books, papers, agreements and documents, and to administer oaths." Chapter 562 of 1908 made the powers of the commission more definite, and ordered it to report its findings and recommendations to the General Court as a basis for legislation.

The investigation conducted by this commission is unexcelled in breadth and thoroughness in the field of American municipal finance. A careful study of conditions proved beyond doubt the existence of inefficiency and corruption. The commission did not stop here, but with great care framed a charter, since enacted in part, which did much to improve the government of Boston.

The charter proposed by the commission may be divided into two parts, one dealing with administrative features, the other with political.² The administrative provisions aimed, first of all, to secure the virtual separation of the executive and legislative branches. The power of confirming the mayor's appointments was taken from the board of aldermen. The old provision against interference with executive business was made more effective by imposing as a penalty for its infraction a fine of not more than \$1,000, or imprisonment for not more than one year or both.

¹ *Finance Commission*, i, p. 9.

² *Ibid.*, ii, pp. 243-277.

The hand of an unfit mayor was stayed by requiring that all heads of departments must be certified by the civil service commission.

The finance commission also sought to make possible a more economical disposition of the city's fund in the annual budget. It proposed that all appropriations to be met from other sources than loans must originate with the mayor. The city council might reduce or omit items, but could not, as formerly, increase any item or add new ones. The mayor was given an absolute veto power over all acts of the city council. He was to have the power of vetoing not only, as formerly, any item in a bill requiring the expenditure of money but also any part of an item. With the heads of the departments independent of the city council and the mayor in control of appropriations, the passage of a more economical, well-balanced budget was assured.

Another extremely valuable feature of the administrative part was the provision for the appointment of a permanent finance commission, endowed with all the powers of the old commission. This body, appointed by the governor and independent of the municipal government, would serve as a constant check upon waste and corruption.

The political features of the proposed charter aimed primarily to secure better men in the elective offices. The commission believed that the bi-cameral organization of the city council caused a diffusion of responsibility, and was too cumbersome. Its recommendation of a single chamber was in keeping with the practice of most large cities in this country. The commission proposed, moreover, that this council should consist of only nine members, to be elected at large for a three-year term, only three being elected each year. Such a scheme would assure a careful consideration of candidates by the entire city. It would be much harder to elect corrupt men than when control of a single ward was all that was necessary. The commission also recommended that the term of the mayor be extended from two to four years. He might be recalled after two years by not less than a majority of all the voters. The commission expected that by this system "the evils and expense of the usual method of recall

will be avoided, that sufficient time will be allowed the voters to judge fairly whether the mayor is able and honest or the reverse, that the danger of an unrestricted four-year term in the case of a bad mayor will be obviated, and that the benefits of a long term in the case of a good mayor will be secured.”¹ The commission proposed that nominations for elective offices be made on the petition of no less than five thousand voters, and that no party designations should appear on the ballot.

Chapter 486 was straightway passed by the legislature of 1909, incorporating practically all the administrative features of the plan, such as a permanent finance commission, the provisions establishing complete independence of the executive branch, subject only to the salutary control of the civil service commission, and the measures making for a more economical budget. The enactment of the political features of the charter was, however, made dependent upon the acceptance by the voters of Boston at the state election November 2, 1909 of one of two alternate plans.

Plan No. 1 provided for a single legislative council, consisting of one member from each ward elected for two years and nine members at large elected for three years. The term of the mayor was left at two years and no change was made in the existing methods of nomination and election. The alternative, Plan No. 2, embodied the proposals of the finance commission, and was adopted by the voters.

EXPENDITURES

Expenditures increased from \$14,476,863 in 1886 to \$27,110,786 in 1897 and \$30,424,804 in 1908. By 1897 the per capita expenditure had risen from \$36.00 to \$52.00; the figure for 1908 was \$47.00.² This period was on the whole one of increase, as the preceding was essentially one of retrenchment. Expenditures increased annually without a single exception from 1886 to 1897. The years 1898 to 1900 constitute a period of rest, the expenditures falling below those of 1897. The years 1901 to 1905 make

¹ *Finance Commission*, ii, p. 248.

² Population in 1886 estimated at 400,000; 1897, 520,000; 1908, 650,000.

up a second period of increase. The most rapid rise in expenditures came from 1894 to 1897. This was the only time in the history of the city that retrenchment in municipal expenditures had not accompanied commercial depression.

The apparent break in 1891 records a change in the commencement of the fiscal year from May first to February first. This was done to bring the fiscal year more into conformity with the municipal year which began the first Monday in January. As early as 1863 the change had been recommended by Mayor Lincoln. "A new administration," he said, "often comes into power with but a small balance of appropriations unexpended, and are often forced into the necessity of making new loans to carry out a project which they had no responsibility in inaugurating."¹ Complete conformity between fiscal and municipal years was secured under the charter of 1909 which made them both begin on the first Monday in February.

In the first half of the period which ends with 1897 expenditures increased \$12,633,923 or 87 per cent; in the second they advanced only \$3,314,018 or 12 per cent. The branches which contributed most to the increase ending in 1897 were streets which advanced over \$5,000,000; schools, \$1,700,000; public grounds, \$900,000; and an entirely new branch, rapid transit which demanded \$1,600,000 in 1897. The increase in the second half was largely due to an advance of \$1,300,000 in the appropriation for schools and to a similar increase in that for rapid transit.

The investigations of the finance commission of 1907 made it very clear that one of the causes of the high per capita expenditure was the loss incident to an inefficient or even corrupt executive department. The chief sources of municipal waste were the maintenance of inefficient and superfluous labor, and the bestowal of contracts at excessive figures to friends of the administration. In 1894 Mayor Matthews stated that "From the earliest times a larger proportion of the public work has been done by day labor than in the other large cities of the country."² After that year the practice of employing city labor for work

¹ *Mayors' Inaugurals*, ii, p. 279 (1863).

² *City Documents*, no. 220 (1894), p. 121.

formerly done by contract increased.¹ Under efficient department heads certain branches of work could be done as economically by city laborers as by contract, but with the executive offices filled with political appointees the opportunity for enormous waste was given. With its large force of employees Boston was thus especially open to waste.

The commission pointed out that, whereas the population had increased but 22.7 per cent from 1895 to 1907, the total number of city employees had increased 59 per cent.² It believed that an increase of 25 per cent would have been ample. The reports of experts employed by the commission bring out the fact "that the efficiency of the labor employed directly by the city had steadily decreased until in 1907 it reached a point where the amount of work done for the city per man per day was only half as much as it had been prior to 1895."³ It was found that "The highest average number of bricks laid per mason per hour, for an entire job done by the Sewer Department, was 78, whereas the lowest average upon the Metropolitan work was 165 and the highest 384."⁴

The loss from improvident contracts was also great. The charter of 1885 and chapter 418 of 1890 insured under honest officials the interests of the city. These statutes required that the heads of departments must invite public bids on any purchase or work involving \$2,000 or more, unless the mayor gave his written permission to dispense with public competition. The mayor's permission was more and more easy to secure after 1895. The percentage of contracts exceeding \$2,000 awarded without advertisement rose from 19 in 1895 to 52 in 1907. The percentage for the rapid transit commission for contracts over \$1,000 from 1894 to 1907 was 18; for the metropolitan water board from 1895 to 1908 for contracts involving over \$500 it was 10; and for the metropolitan sewerage board from 1901 to 1908 for contracts over \$500 it was only 6½.⁵

¹ *Mayor's Inaugural* (1899), p. 151.

² *Finance Commission*, ii, p. 201.

³ *Ibid.*

⁴ *Ibid.*, i, p. 267.

⁵ *Ibid.*, i, pp. 481, 482.

The reports of the commission give many specific instances of loss through the granting of contracts to political supporters, to firms in which members of the city council were interested, and to men who would apparently share their excessive profits with those in power. Evasion of the law was made much more difficult by the incorporation in the new charter of the commission's recommendation. The maximum for contracts which might be awarded without advertisement was reduced to \$1,000. The mayor could dispense with public advertisement only in case the department head concerned furnished him with a signed statement giving in detail the reasons for not inviting bids by advertisement.¹

The annual loss during the last few years of the period from inefficiency and corruption was at least two or three millions of dollars. Experts employed by the commission gave \$1,900,000 as the loss for 1906 and 1907 in five departments alone—the street cleaning and watering, sanitary, sewer, water and paving departments.

General Government. Expenditures for general government increased from \$633,459 in 1886 to \$1,721,369 in 1908. In the period 1903 to 1906 they constituted 5.4 per cent of the total expenditures of the city, a per capita figure of \$2.67. As in former periods, salaries demanded the larger part of the appropriation for general government. The great increase in this item was almost wholly due to the creation of new departments and the enlargement of old ones. The increase in individual salaries accounts for only a small part of the advance.

It will be recalled that in the years following the War individual salaries rose very rapidly and then remained practically stationary in the period of retrenchment after 1873. The pay of certain selected officials was shown during these years. In the table given below the salaries of these same officials have been brought down to 1908, only those years being given in which changes occurred.

¹ *Acts*, 1909, ch. 486, sec. 30.

	1886	1890	1901	1902
Mayor	\$10,000	\$10,000	\$10,000	\$10,000
Treasurer	6,000	6,000	6,000	6,000
Auditor	5,000	5,000	5,000	6,000
City Clerk	4,000	5,000	5,000	5,000
Assessors	3,000	3,000	4,000	4,000

The fall in general prices which continued from 1873 to 1896 did not affect salaries except during the first few years. Not even during the depression of the nineties did a reduction take place. The pay of the day laborers showed no change from 1883 to July 1, 1907,¹ when it was raised from \$2.00 to \$2.25. Mayor Fitzgerald urged the advance on the ground that the cost of living had risen.² The acceptance of the eight-hour law in 1900 was equivalent to an increase in pay, the hours of labor being reduced from fifty to forty-four.³ This change caused an increase in the expenditures of the street department alone of \$168,000.⁴

The salaries were in many cases excessive. This was true in a small degree of those paid the heads of departments and in a greater degree of the remuneration of minor officials and clerks. The finance commission of 1895 found that "the salaries of the minor positions, such as inspectors, clerks, etc., are generally higher than those paid for similar positions in general business."⁵ It gave a similar opinion of the wages paid day laborers. The commission of 1907, after a very careful investigation, gave the "excessive number of employees in every grade of the public service, and the excessive salaries paid to all classes of employees" as two of the chief sources of loss to the city.⁶ These evils, in the opinion of the commission, went back thirty years, but only became of very great importance since 1895.⁷

The commission found that the salaries paid by the city were much in excess of those given for similar work in Boston by the state and federal governments and much greater than those paid

¹ *Finance Commission*, i, p. 266.

² *Mayor's Inaugural* (1907), p. 39.

³ *Acts*, 1899, ch. 344.

⁴ *Mayor's Inaugural* (1901), p. 119.

⁵ *City Documents*, no. 142 (1895), p. 26.

⁶ *Finance Commission*, i, p. 207.

⁷ *Ibid.*, p. 340.

by private employers of labor.¹ The following comparisons, based on figures for 1907, confirm this statement. Exclusive of heads of departments, deputies, secretaries, and the like, 33 per cent of all the salaries of \$1,000 or over paid by the state were in excess of \$1,500, whereas 53 per cent of those of \$1,000 or over paid by the city were above \$1,500. The state paid no salaries above \$2,700; fourteen of the employees of the city or 5 per cent of those receiving \$1,000 or over were paid more than that amount.² The commission recommended a number of specific reductions, a few of which were put into effect.

But a source of loss more important than that of excessive salaries was the unwarranted increase in the number of city employees. The following table shows the general course of expenditures during the period in four departments which come under expenditure for general government — assessors', auditor's treasurer's and collector's. The figures are in thousands of dollars.

Year	Assessors'	Auditor's	Treasurer's	Collector's
1887	110	23	35	58
1895	138	29	40	92
1900	163	43	45	113
1906	186	41	48	134
1907	190	41	50	159
1908	175	40	49	124

The commission found the expenditures of all these departments excessive, especially the assessors' and collector's. After 1896 the office of collector was a political one. The commission estimated that from 1895 to 1907 the work of the department increased but 25 per cent.³ The expenditures during the same period advanced 73 per cent. The increase of \$25,000 in 1907 measured, according to the commission, the cost to the city in a single department of the extinguishment of political debts. The expenditures of these four departments were reduced by the administration of 1908 in compliance with the demands of the finance commission.

¹ *Finance Commission*, ii, p. 201.

² *Ibid.*, i, pp. 338-340.

³ *Ibid.*, i, p. 57.

During this period the practice of remunerating the members of the city council was introduced. Under authority of chapter 286 of 1888 a salary of \$1,500 was paid the aldermen. After the enactment of chapter 410 of 1896 the members of the common council received \$300.

During the greater part of the period the question of building a new city hall received much attention. In 1874, only a decade after the completion of the present city hall, the growth of public business required the housing of some of the departments in rented offices. By 1885 the amount annually expended in this way was \$14,000. In 1892 its rise from \$22,000 to \$32,000 caused Mayor Matthews to make a careful study of the situation.¹ He concluded, as did a special committee of the board of aldermen, that a new city hall was much needed. The Mayor was in favor of a site on Beacon Hill.² The project was never undertaken, so great were the demands upon the city treasury. In 1896 alterations in the top of the city hall added about 10,000 square feet of floor space.³

During the summer of 1908 the finance commission referred the question of a new city hall to a committee of experts. Their report favored a new structure on account of the loss in efficiency due to the scattering of departments, and because of the waste in hiring offices, when the city possessed available land. They strongly recommended a site in the same section, believing that the removal of the municipal offices to a location remote from the business center would result in considerable loss in efficiency.⁴ The erection of the new city hall in the Public Garden had been favored by many, especially by Mayor Fitzgerald.⁵

It will be noticed that "other" expenditures for general government rose in 1897 to a much higher level.⁶ This increase is explained in great measure by the establishment of a municipal printing plant. The plant, purchased at an exorbitant price, had to be practically cast aside in four years. The employees,

¹ *Auditor's Report* (1892), p. 209.

² *City Documents*, no. 152 (1893).

³ *Mayor's Inaugural* (1897), p. 66.

⁴ *Finance Commission*, ii, pp. 105-122.

⁵ *Mayor's Inaugural* (1906), p. 44.

⁶ See Appendix, p. 352.

with the exception of the clerical force, were beyond the control of the civil service law, and received their positions as rewards for political service. In spite of the exorbitant prices charged its customers, the various city departments, the plant always showed a large loss. In 1902 an expert reported that the loss to that time had been \$40,000. The experts of the finance commission estimated that for 1907 it was \$18,000.¹

In 1908, however, Mayor Hibbard succeeded in obtaining large economies in the department. The following table gives the operating expenses and gross revenues from February 1st to September 30th in the years 1905 to 1908.² During the eight months of 1908 the department was on a business basis under a competent head. The figures are in thousands of dollars.

	1905	1906	1907	1908
Total operating expenses	110	122	120	75
Gross revenue	101	115	110	109
Deficit	8	6	10	..
Surplus .....	..	..	..	33

This remarkable result in 1908 was accomplished in spite of large reductions in prices. The figures show what is possible under an administration comparatively free from political pressure. In his inaugural of 1909 Mayor Hibbard remarked that these economies had "incidentally demonstrated that municipal ownership is a matter of the individual and not the principle."³

Police. Expenditures for police increased from \$1,147,868 in 1886 to \$2,060,190 in 1908. The relative importance of this branch declined, however, from 7.9 per cent in the period 1883 to 1886 to 6.6 per cent in the years 1903 to 1906. Meanwhile the per capita figure rose from \$2.60 to \$3.25.

Chapter 291 of 1906 placed the control of the department in the hands of a single commissioner. It also established an independent licensing board to take over the power, formerly exercised by the board of police, of granting liquor and certain other licenses.

¹ *Finance Commission*, ii, pp. 7-17.

² *Ibid.*, p. 12.

³ *Mayor's Inaugural* (1909), p. 7.

The growth of the police force is seen in the increase of the expenditure for salaries. In 1887 the board of police secured the enactment of legislation authorizing them to appoint a reserve force of such size as the city council should determine. All appointments to the regular police force were henceforth to be made from this reserve body.¹ The city council authorized the appointment of not over one hundred members. A few were appointed in 1887. The results of the experiment were so satisfactory that the number was increased to the maximum in 1888.² The pay of these reserve officers was fixed by the act at not over \$2.50 a day when on duty. The annual expenditure for the reserve force averaged about \$60,000 until 1904; then it rose to \$126,000 in 1908.

The act of 1885 provided that the number of the patrolmen should not be increased beyond the maximum fixed by the city. In 1888 this was raised from 649 to 679. The actual force, including the officers, patrolmen and reserves, rose from 785 in 1886 to 896 in 1888. From there it declined to 868 in 1891 when the need of a larger police force compelled the exercise of the power of appointment up to the maximum. By 1894 the number of the force had risen to 923. The expenditure for salaries advanced but \$135,000 from 1886 to 1894.

In 1894 the board of police asked the city government to increase the maximum number of patrolmen from 679 to 1,000, informing them that the increase was absolutely necessary.³ Authority for this increase was given the following year, and by 1896 183 additional patrolmen had been appointed, accounting for the rise in expenditures for salaries from \$1,135,000 in 1894 to \$1,395,000 in 1896. The increase was made up in part by the transfer to the police department of 52 policemen formerly under the supervision of the park, market and water departments.⁴ This desirable consolidation was recommended in 1895 by Mayor Curtis,⁵ and secured by legislation the same year.⁶

¹ *Acts*, 1887, ch. 177.

² *House Documents*, no. 25 (1889), p. 4.

³ *Mass. Public Documents*, no. 49 (1894), p. 6.

⁴ *Ibid.*, no. 49 (1895), p. 5.

⁵ *Mayor's Inaugural* (1895), p. 17.

⁶ *Acts*, 1895, ch. 449, sec. 26.

From 1896 to 1908 the expenditure for salaries increased gradually. The greater part of the advance took place before 1902; about that time the department reached its maximum membership. The rapid rise in the expenditure for salaries in 1908 was largely due to the appointment of about a hundred additional men under the provisions of chapter 513 of 1907. This act granted the members of the force relief from duty without loss of pay one day in fifteen.¹ The individual salaries of the patrolmen remained practically unchanged throughout the entire period. The salaries of some of those of higher rank increased, however, the pay of the captains for example rising from \$2,000 to \$2,500.

The efficiency of the police department was increased during this period by the installation of a signal system. The success of the scheme, which was on trial in a single section of the city in 1886, led to its extension to all parts of Boston in the next few years.² The initial expenditure rose as high as \$99,000 in 1888; but the annual cost thereafter was about \$60,000.

The expenditures of the department also increased on account of more liberal pension legislation. By 1908 pension expenditures had risen to \$131,000, or about 6 per cent of the total department expenditures. Pensions were then given not only to those incapacitated in the discharge of their duty, or to those incapacitated from causes not connected with the discharge of their duty who had served fifteen consecutive years, but also to those who had reached the age of sixty-five, or who at the age of sixty had served for twenty-five consecutive years.³

The relinquishment of police control to a commission or commissioner responsible only to the governor was a source of regret to successive administrations. Mayor Matthews repeatedly condemned the change.⁴ In his inaugural of 1896 Mayor Quincy referred to the recent increase in expenditure as unwarrantable. He believed that the city government should secure legislation which would restrict in some measure the authority of

¹ *Mass. Public Documents*, no. 49 (1907), p. 18.

² *Mayor's Inaugural* (1887), p. 113.

³ *Statutes Relating to the City of Boston*, 1908, p. 236.

⁴ *City Documents*, no. 220 (1894), p. 15.

the board or at least "limit to some reasonable percentage, corresponding with the growth of the financial resources of the city, the right of this board to increase from year to year its requisitions upon the city treasury."¹ In 1903 Mayor Collins spoke of the act of 1885 as "a violation of the first principle of home rule and a needless and profitless wound to the pride of the first City in the Commonwealth."² This remark points out the real cause of the unpopularity of the act. It was one of a large number of legislative enactments which during this period brought the government of Boston more and more under the control of the State House. The General Court was forced to legislate for the city, as Boston showed less and less ability to manage her own affairs. Naturally, this gradual decline of home rule, a distinct loss to the educational power of self-government, was resented by many.

As an administrative measure the act of 1885 seems to have been successful. Police expenditures increased in this period, but the population increased almost as rapidly. The rise in the amount required by the board of police was not great, an advance of 80 per cent from 1886 to 1908. The total expenditures of the city increased in the meantime 110 per cent, those for general government, the branch probably the most responsible to the mayor, about 170 per cent, and those of the fire department, the organization of which was very much like that of the police, 97 per cent. Moreover, there was a tendency to place upon the police more and more work, formerly looked upon as outside their province,³ such as work at elections and in the listing of the assessable polls.⁴ In view of these considerations, the withdrawal of the police from the control of the city government does not seem to have led to extravagant requisitions by the commissioners.

Fire. The expenditures for protection from fire increased from \$789,000 in 1886 to \$1,552,000 in 1908. The greater part of the advance was made during the first half of the period, expenditures

¹ *Mayor's Inaugural* (1896), p. 23.

² *Ibid.* (1903), p. 6.

³ *Mass. Public Documents*, no. 49 (1907), p. 16.

⁴ *Acts*, 1903, ch. 279.

reaching \$1,329,602 by 1897. The relative importance of this branch of expenditure decreased from 5.7 per cent in the years 1883 to 1886 to 4.6 per cent in the period 1903 to 1906. The per capita figure rose during the same time from \$1.90 to \$2.29.

The management of the fire department continued until 1895 in the hands of the three commissioners appointed by the mayor, subject to confirmation by the board of aldermen. In 1895, chapter 449 transferred the control of the department to a single commissioner. He was to be appointed by the mayor for a term of three years without confirmation by the board of aldermen. The act of 1895 greatly reduced the chances of legislative interference, and did much to bring the fire department to the high degree of efficiency which it unquestionably attained during this period. In January, 1906, the National Board of Fire Underwriters, after a careful inspection, commended highly the effectiveness of the department.¹ The investigations of the finance commission reveal, however, that in 1906 and 1907 politics interfered with this well-organized department. Fortunately the corruption did not go far enough to affect appreciably its efficiency.

Individual salaries were raised a little in 1887; after that year they remained practically constant. The increase in salaries from \$512,000 in 1886 to \$1,142,000 in 1908 was largely due to the increase in the size of the force. In 1887 the department numbered 690, about 300 of these being call men. In 1908 it had practically 1,000, only a very few being call men. The elimination of the call men was due to the constant demand of the commissioners that Boston give up a system suited only to a large town. In 1890 the commissioners wrote to the city council that "the call element is the standing weakness of the Department, and as long as it exists, an important obstacle will remain in the path of progress."² The city council felt, that the condition of the city's finances would not warrant a sudden change. Between 1887 and 1897, however, the number of the call men was reduced from 300 to 90. The total force increased in the same period from 690 to 850, accounting for the rise in salaries from

¹ *Finance Commission*, i, p. 164.

² *City Documents*, no. 64 (1890), p. 6.

\$523,244 to \$872,469. After 1897 the growth in the expenditure for salaries and for the department as a whole was more gradual.

The increase of the force was also made necessary by the introduction in 1896 of the system of allowing each member of the department one day in eight off duty.¹ In December, 1905, this liberty was increased to one day in five.² This last change added approximately \$80,000 to the expenditures.³

Changes in the pension system were made by chapters 174 of 1888 and 347 of 1892. The former extended the privileges to members of the call force who had served fifteen consecutive years. The latter increased the payment to those totally disabled in the performance of their duty from one-half to two-thirds of their salary, and to those retired after fifteen years service from not over one-third to not over one-half. Expenditures for pensions increased from \$2,000 in 1887 to \$96,000 in 1908, constituting in the latter year 6 per cent of the total expenditure of the department.

Down to 1902 a considerable amount was spent annually for new engine houses. In 1901 the commissioner stated that for some years to come the present accommodations would be ample for the needs of the department. He believed that the money could be much more wisely expended in improving the equipment.⁴ In 1896 the city appropriated \$15,000 for the installation of salt water pipes.⁵ The system was not carried far, the merchants objecting that the use of salt water would be especially disastrous to their goods. Later the construction of the Charles River Basin made possible the use of fresh water in unlimited amounts, and caused Mayor Hibbard to recommend the installation of a very comprehensive system.

Institutions. The expenditure for the institutions increased from \$1,097,542 in 1886 to \$1,949,229 in 1908. It declined in relative importance from 8.5 per cent in the years 1883 to 1886 to 5.8 per cent in the period 1903 to 1906. The per capita

¹ *Mayor's Inaugural* (1897), p. 96.

² *City Documents*, no. 16 (1906), p. 2.

³ *Ibid.*, no. 18 (1907), p. 2.

⁴ *Ibid.*, no. 15 (1901), p. 1.

⁵ *Mayor's Inaugural* (1898), p. 120.

figure rose in the meantime from \$2.80 to \$2.85. These figures somewhat underestimate the real increase, however. In 1888 the appropriation for the house of correction and in 1897 that for the house of industry were transferred to the account of the County of Suffolk. The addition of \$280,000 demanded by these institutions in 1908 shows a real expenditure in the last year of the period of \$2,229,000.

The amount expended by the overseers of the poor increased from \$109,000 in 1886 to \$143,000 in 1908. The commercial depression of the early nineties is reflected in the sudden advance from \$112,000 in 1893 to \$135,000 in 1894. Expenditures were maintained at this point until 1899. Early in that year the overseers noted a falling off in the number of applicants, a circumstance which they attributed to the return of better times.¹

During the hard times many attempts were made to induce the city to make special appropriations for the relief of the poor, either through the direct distribution of money or by the employment of those out of work. Inasmuch as the statutes forbade the spending of public money for this purpose except through the overseers,² the city government refused to accede to requests, which at times rose to threats of personal violence.³ In his inaugural of 1894 Mayor Matthews appealed to the benevolence of private persons, and also encouraged the heads of departments in their policy of giving work wherever it could be done without loss to the city. Much aid was also given by a relief committee, composed partly of officials and partly of public spirited citizens. This committee paid from private contributions the extra cost of carrying on street, park and sewer work during the winter months.⁴ The coal famine in the winter of 1902-3 caused extra expenditure for the overseers. They were obliged to buy in bulk instead of in small lots from the local coal dealers and also to deliver the fuel themselves.⁵

¹ *Mayor's Inaugural* (1901), p. 84.

² Ch. 374 of 1874 permitted the city council to appropriate annually a very small amount, however, for temporary aid to the poor.

³ *City Documents*, no. 220 (1894), p. 105.

⁴ *Mayor's Inaugural* (1894), pp. 20-22.

⁵ *City Documents*, no. 27 (1903), pp. 7, 8.

The slow growth of the expenditures made by the overseers indicates economical management. The last of the period they were requiring work from all able-bodied men.¹ The trust funds of the overseers amounted at the end of the period to over \$800,000.²

Until 1897 the correctional institutions, the almshouses, and the insane hospital were under the same management. In 1888 the joint standing committee on public institutions reported that the method of purchasing supplies had been wasteful. They were of the opinion that better management could be obtained by transferring the control to three paid directors.³ Authority for this change was secured by chapter 245 of 1889 which gave the mayor power to appoint, subject to the confirmation of the board of aldermen, three men to serve for three years as commissioners of public institutions. In 1895 the whole department was placed under the control of a single commissioner.⁴ This gradual change from a board of twelve to a single head was typical of the movement going on in many branches of municipal service. It showed the increasing confidence of the voters in the concentration of executive responsibility.

The act of 1895 was soon superseded by chapters 395 and 451 of 1897. Separate departments were established for the care of children, paupers, the insane, and criminals. The criminals remained in charge of a single paid commissioner, known as the penal institutions commissioner. He was appointed by the mayor, without confirmation by the board of aldermen, for a term of three years. The other three classes were each placed in charge of a board of seven trustees, appointed by the mayor, without confirmation by the board of aldermen, to serve without pay for five years. These changes had been recommended very earnestly by Mayor Quincy in his inaugurals of 1896 and 1897. The success of unpaid boards in the management of the state institutions led him to favor their adoption in certain municipal departments. He believed, moreover, that the movement for a more scientific classification would be furthered by the establishment of separate

¹ *City Documents* no. 27 (1905), p. 3.

² *Ibid.*, no. 28 (1907), p. 14.

³ *Ibid.*, no. 79 (1888).

⁴ *Acts*, 1895, ch. 449, sec. 14.

departments.¹ The continuity of the figures for the various institutions was broken by this change of 1897. Since then the expenditures have been classified by departments.

The story of the pauper institutions during this period is one of growth, in which the attempt to attain a better classification of the various charges made necessary frequent changes in location and many additions to the plant. At the beginning of the period many of the paupers were already sheltered in homes distant from the old house of industry on Deer Island. The aged poor were housed in the old Charlestown almshouse, the female paupers on Austin Farm in West Roxbury, and the pauper children in the old Roxbury almshouse on Marcella Street. The male paupers and the juvenile offenders still lived on Deer Island in proximity to the criminal and vicious classes confined in the house of industry. Before the end of 1887, however, practically all the male paupers had been removed to Rainsford Island. The female paupers were transferred at the same time from West Roxbury to their new home on Long Island, leaving Austin Farm for the insane. In 1889 the male and female paupers exchanged places on Rainsford and Long Islands.²

In 1892 the various buildings were deemed inadequate, and very large appropriations were made, almost a million dollars being spent in construction during the next few years. Large additions were made to the house of industry; new buildings were erected on Long Island for the paupers; and much was expended for other branches. The improvements at Long Island permitted in 1894 the concentration of all the paupers there, except the aged poor and the children.³

The removal of the paupers from Rainsford to Long Island made possible the transfer of the house of reformation for boys from Deer to Rainsford Island.⁴ In 1895 the city complied with a legislative requirement by removing the truant boys,⁵ formerly housed on Deer Island, to a home in West Roxbury.⁶

¹ *Mayor's Inaugural* (1896), pp. 26, 27.

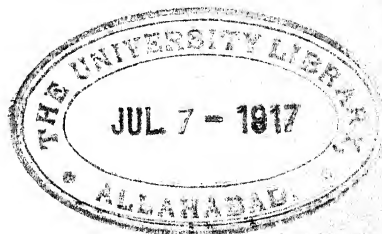
² *Ibid.* (1890), p. 77.

³ *Auditor's Report* (1894), p. 236.

⁴ *Ibid.* (1895), p. 245.

⁵ *Acts*, 1886, ch. 282.

⁶ *City Documents*, no. 220 (1894), p. 109.



The great appropriations of these few years thus made possible the removal from Deer Island of all but criminal offenders, and allowed a scientific classification to a considerable extent.

The expenditures of the house of industry which amounted to \$343,000 in 1886 fell to \$171,000 in 1887 with the removal of the male paupers to Rainsford Island. Except for an expenditure of \$214,000 in 1893, the expenditures of this institution did not rise above \$165,000 until 1896. In that year further additions were made at a cost of \$125,000,¹ bringing the total expenditure for 1896 to \$291,000.

The expenditures of the house of correction at South Boston remained constant in the meantime, being \$96,000 in 1896. Although its cost after 1887 appears under the expenditures of the County of Suffolk, its subsequent history can best be told in connection with the other institutions. The number of inmates increased from 466 in 1886 to 622 in 1895, crowding its capacity to the utmost. Mayor Quincy in his inaugurals of 1895 and 1896 referred to a new house of correction as a pressing necessity.² Under the terms of chapter 536 of 1896, \$500,000, borrowed inside the debt limit, might be expended for the construction of the new institution, to be known as the Suffolk County Reformatory. The house of industry was henceforth to be established as the house of correction for the County of Suffolk, and was to receive as soon as possible all the inmates of the South Boston institution. As soon as the prisoners had been transferred to Deer Island, the old house of correction was to be sold and the proceeds were to go into the sinking fund established for the reduction of the new reformatory loan.

The act of 1896 brought the two correctional institutions into closer relations, placing them both under the authority of the County of Suffolk. The following table shows the expenditures of these penal institutions since 1897. The figures are in thousands of dollars.

¹ *Auditor's Report* (1895), p. 245.

² *Mayor's Inaugural* (1895), p. 17; *ibid.* (1896), p. 27.

Year	South Boston	Deer Island	Other	Total
1897	81	216	..	297
1898	97	210	21	329
1899	124	234	21	380
1900	145	196	21	364
1901	130	184	38	353
1902	88	171	229	489
1903	..	250	170	421
1904	..	248	104	353
1905	..	236	26	264
1906	..	228	20	249
1907	..	261	24	286
1908	..	258	20	279

The rise in "other" expenditures in 1901 records the initial expenditure for the new reformatory. This was built during the next few years at a cost of about \$470,000. In November, 1902, the citizens of South Boston saw the long-awaited departure of the prisoners to their new home on Deer Island.¹ The expenditures of the consolidated institutions were much less than those of the two separate institutions.

Although the accommodations at Deer Island were much increased by the erection of the new reformatory, it was evident by 1908 that the institution was again overcrowded. The number of the inmates was then about 1600, much in excess of the normal capacity.

The expenditures of the pauper institutions department increased from \$164,000 in 1897 to \$228,000 in 1908. The department had charge of the almshouses at Long Island and Charlestown. During this period the Long Island institution took on the character of a hospital, where only the sick and feeble were housed. The average daily population in 1906 was 800, practically the same as that in 1893.² But the growing proportion of the sick among the inmates naturally much increased its cost. The change in the character of the population was due in large measure to the vagrant law of 1898 which permitted the committal of vagrants to the State Farm at Bridgewater.³ By chapter 393 of 1908 the name of the department was

¹ *Auditor's Report* (1902), p. 172.

² *City Documents*, no. 30 (1907), p. 2.

³ *Ibid.*, no. 29 (1903), p. 3.

changed to the Infirmary Department, the legislature thus recognizing the character of its service.

The children's institutions department developed very rapidly in the hands of the trustees. The rise in expenditures from \$97,000 in 1897 to \$212,000 in 1908 records the cost of the movement for the better care of these wards. In its first year the new board adopted the policy of placing pauper children in homes in the country.¹ By 1898 this practice permitted the permanent closing of the Marcella Street Home which had become ill-adapted for the care of dependent and neglected children.²

The insane hospital was continually enlarged during the period to provide accommodation at home for as many of the city's insane as possible. The rise in expenditures from \$63,000 in 1886 to \$88,000 in 1887 was due to the establishment of a home where chronic and mild cases might be treated. This was started in the buildings at Austin Farm, made vacant by the removal of the female paupers to Long Island. The development of this estate made possible an increase in the number of insane cared for by the city from 237 in 1886 to 427 in 1891. In 1892 the city purchased for \$34,500 Pierce Farm which was adjacent to Austin Farm. During the next five years almost \$500,000 was spent in the erection of new buildings on these farms, permitting in 1895 the closing of the old hospital at South Boston.

After 1896 the expenditure for the city's insane in state institutions has been included in the expenditure of the hospital. An expenditure of \$170,000 in 1897 caused Mayor Quincy to remark that as long as Boston cared for part of her insane it would be more economical to assume the whole responsibility.³ In 1900 the state decided to assume the entire cost of caring for the insane after January 1, 1904. Chapter 451 of 1900 which provided that all insane not in state institutions should be transferred to them made a single exception of the Boston Insane Hospital. The city was to be allowed \$3.25 a week for every free patient. In order to provide for a still larger number of its insane the city expended over \$400,000 in improvements between 1901 and 1905.

¹ *Mayor's Inaugural* (1898), p. 74.

² *Ibid.* (1899), p. 111.

³ *Ibid.* (1898), p. 79.

These changes permitted an increase in the number of patients to 700 at the end of 1906, when the institution was again crowded.¹

The amount allowed by the state was insufficient. In 1907 the finance commission estimated the cost for each patient at \$4.40 a week.² In his inaugural of 1901 Mayor Hart accounted for the excessive expenditure on the grounds that the hospital cared for the more trying cases, and that its organization was not suited to economical management.³ Late in December, 1907, the finance commission issued a communication to the mayor in which it strongly advised the city to give up caring for its insane. It pointed out the excessive cost of maintenance, the large capital expenditures in the past, and the probability of much larger expenditures for renovation and additions in the immediate future. The commission estimated an annual saving of over \$100,000, if the state could be induced to take over the insane hospital, and recompense the city for \$1,500,000 spent in construction.⁴

In accordance with the recommendation of the commission, chapter 613 of 1908 was passed. This act provided that on December 1, 1908 the state should take possession of the insane hospital, henceforth to be known as the Boston Insane Asylum. The damages sustained by the city were to be determined by the State Board of Insanity, subject to the approval of the governor and council, the mayor, and the trustees of the insane hospital. In case they failed to come to an agreement, the amount was to be determined by commissioners appointed by the superior court. The city asked for the appointment of the commissioners immediately after the taking, but subsequently agreed to the settlement of its claim for \$1,000,000.⁵

The expenditures of the city hospital increased from \$215,000 in 1887 to \$909,000 in 1908. During these years there was an almost continual expenditure for the enlargement of the plant. From 1893 to 1898 \$1,200,000 was expended in new buildings,

¹ *City Documents*, no. 21 (1907), p. 1.

² *Finance Commission*, i, p. 116.

³ *Mayor's Inaugural* (1901), p. 57.

⁴ *Finance Commission*, i, pp. 133-136.

⁵ *Boston Transcript*, May 6 and June 5, 1909.

almost doubling the capacity of the hospital.¹ The method followed was to erect additional pavilions connected with the central structure. In his inaugural of 1898 Mayor Quincy stated that the concentration of so many patients had been partly responsible for an average cost considerably less than that found in New York or Philadelphia.² The larger expenditure from 1906 on was partly due to the initial expenditures of the consumptives' hospital.

Public Grounds. The expenditures for parks and public grounds rose from \$1,131,618 in 1887 to \$2,409,906 in 1894, and then declined to \$1,200,363 in 1908. After 1901 the city's share of the expenditures of the metropolitan park system accounted for almost one-half the expenditure. The greater part of the expenditure fell in the years 1890 to 1897, when the great park system was being completed. After 1897 the expenditure was largely due to the cost of maintaining the magnificent system already established. In the period 1883 to 1886 public grounds demanded 5.7 per cent of the total expenditures, a per capita charge of \$1.87; in the years 1903 to 1906 this branch called for only 3.9 per cent, a per capita figure of \$1.91.

Throughout the period most of the expenditure placed under the head of public grounds was for parks. The expenditures for parks alone are given in the following table, the figures being in thousands of dollars.

Year	Amount	Year	Amount	Year	Amount	Year	Amount
1887	\$1,011	1892	\$1,133	1897	\$1,033	1902	\$1,371
1888	654	1893	1,445	1898	673	1903	701
1889	540	1894	2,241	1899	828	1904	992
1890	890	1895	1,120	1900	687	1905	642
1891	1,036	1896	562	1901	379	1906	1,204
..	....	..	....	..	....	1907	945
..	....	..	....	..	....	1908	990

The expenditure for public squares, and cemeteries constitute the remaining items. In 1908 of the \$1,200,000 expended for this branch, \$990,000 was for parks, \$132,000 for the Common and \$77,000 for cemeteries.

¹ *Mayor's Inaugural* (1898), p. 82.

² *Ibid.*, p. 83.

The task of developing the great park system remained throughout the period in the hands of the commissioners established by the act of 1875. The appropriations for the purchase of land and for construction were met almost entirely from the proceeds of loans, authorized by the legislature. From 1886 to 1899, when the last permission for park loans was given, the legislature authorized the issuance of loans amounting to \$10,200,000 outside the limit of indebtedness and \$1,119,300 inside the debt limit.

From 1887 to 1891 the city availed itself of the permission to borrow for park construction granted in chapter 304 of 1886. Chapters 312 of 1887 and 392 of 1888 also authorized loans outside the limit, of \$400,000 and \$600,000, respectively, to be used in the purchase of park lands. Chapter 271 of 1890 permitted a loan of \$200,000 for parks in the Charlestown district. This loan was to be reckoned outside the debt limit until after November 1, 1890.

In 1891 the state made possible the more rapid development of the park system by the passage of chapter 201 which permitted the borrowing of \$3,500,000 outside the debt limit, in instalments of \$700,000 a year. By 1893 even this rate had become too slow, chapter 211 striking out the prohibition against the issuance of more than \$700,000 a year. The expenditure for parks rose to \$1,445,000 in 1893 and \$2,241,000 in 1894. During 1894 the Fens, Muddy River Improvement, Jamaica Park, the Arboretum and connecting parkways were practically completed and opened to the public.¹

It had been expected that the loan of \$3,500,000 would be sufficient to complete the system.² This estimate fell far short, however, owing to the payment of much larger sums than the city had anticipated for land.³ An additional million, outside the debt limit, was authorized by chapter 396 of 1894, the loan not to be issued, however, until 1895.

At this time the opinion began to prevail that the development of the park system had proceeded far enough. The system as

¹ *City Documents*, no. 220 (1894), p. 113.

² *Ibid.*, p. 113.

³ *Mayor's Inaugural* (1894), p. 11.

outlined by the first commissioners was almost completed. In his valedictory address of 1894 Mayor Matthews advised that any future loans for park purposes be within the debt limit.¹ Mayor Curtis in 1895 urged that no more land be purchased.² Subsequently the legislature gave authority for the issue of \$2,000,000 outside the debt limit, \$1,000,000 by chapter 453 of 1896, \$500,000, by chapter 313 of 1898, and \$500,000 by chapter 303 of 1899.

The annual expenditure for parks only twice exceeded \$1,000,000 after 1897, averaging about \$850,000. The improvements the last half of the period, except for the establishment of the metropolitan park system, were gradual, and were more in the direction of beautifying the areas already laid out, than of adding to the system. Much attention was given to the planting of trees.³

About \$1,400,000 was spent in developing a new branch, the playgrounds. The remoteness of the parks prevented their use by many sections of the city. Between 1891 and 1898 a few playgrounds were established; but the acceptance of a definite policy was due to the efforts of Mayor Quincy. In his inaugural of 1897 he urged that every ward should have a playground, calling attention to the large appropriations recently made by New York City for that purpose.⁴ In 1898 the park commissioners approved the policy.⁵ The required legislative authority was secured by chapter 412 of 1898. This act authorized the park commissioners "for the purpose of establishing a comprehensive system of playgrounds . . . to purchase, with the approval of the mayor of said city, land for playgrounds in such different locations, not exceeding twenty in number, as they may deem best adapted for such purpose." Not more than \$200,000 was to be expended in any one year, a total loan of \$500,000, to be within the debt limit, being authorized.

In his inaugural of 1898 Mayor Quincy remarked that the park system was developed to an extent that would give the public everything required for its enjoyment during the next twenty-

¹ *City Documents*, no. 220 (1894), p. 114.

² *Mayor's Inaugural* (1895), p. 11.

³ *Ibid.* (1898), p. 50.

⁴ *Ibid.* (1897), pp. 14-20.

⁵ *Ibid.* (1898), p. 53.

five or thirty years.¹ This statement seems to be warranted by the great cost of the system alone. The total expenditure for the municipal system for land and construction to January 31, 1909 was \$18,845,515. The system included at that time 2,381 acres of land and 43 miles of driveway.²

According to the provisions of a bequest made by the late George F. Parkman, the city looked forward at the close of the period to enjoying the income of an estate estimated at \$4,000,000. By the terms of the will this income was to be used for the preservation of such of the public parks and grounds, especially the Common, as were in existence at the time of making a codicil to the original will.³

The decline in the expenditure for the city's own parks after 1897 was coincident with the growth of the demands of the metropolitan park commission. The metropolitan parks district was established by chapter 407 of 1893. The district was to comprise certain cities and towns named in the act, thirty-seven in all. Within these a commission of five persons, appointed for a term of five years by the governor with the consent of his council, was to exercise the powers conferred by the act. The purpose of this legislation was to gradually construct a series of parks and parkways which had been recommended by a special commission appointed in 1892. The act provided that towns might transfer their parks to the commission with its consent. The money for the development of the park system was to be obtained from loans issued by the commonwealth, on its own credit. The interest and sinking fund requirements and the cost of maintenance were to be assessed upon the cities and towns in the district. The proportion to be paid by each town and city was to be determined for the five years following the first issue of bonds by commissioners appointed by the supreme court. Before the expiration of the first five years and every five years thereafter a new commission was to determine the proportion. The assessment of Boston for the first five years was fixed by the act at 50 per cent.

¹ *Mayor's Inaugural* (1898), p. 50.

² *Auditor's Report* (1908), p. 259.

³ *Mayor's Inaugural* (1909), p. 6.

The act establishing the metropolitan district permitted loans to \$1,000,000. Subsequent acts increased the amount, as the development of the system progressed. By 1900 the metropolitan park debt amounted to \$9,425,000;¹ at the end of 1908 it was \$14,670,000.²

The debt of \$14,670,000 was made up of \$8,835,000 borrowed under the so-called "Park Acts," \$5,135,000 under the "Boulevard Acts," and \$700,000 under the "Nantasket Beach Acts." In 1894 it became evident that certain parts of the system would have more the character of boulevards and parkways than parks. In order to provide more adequately for this part of the commission's work, the legislature enacted supplementary legislation. Under chapter 288 of 1894 and subsequent statutes, known as the "Boulevard Acts," appropriations were, accordingly, made for the construction of parkways. One-half the expenditure arising under these "Boulevard Acts" was borne by the commonwealth. Chapter 464 of 1899 which provided for the acquirement and maintenance of Nantasket Beach differed from the "Park Acts" by including the town of Cohasset in the district for the purpose of assessment.

An apportionment of the cost of the metropolitan park system was made in 1895. This was set aside, however, by chapter 550 of 1896 which provided that until after January 1, 1900 all interest and sinking fund requirements and expenditures for maintenance should be met from the proceeds of loans.³ Consequently, the first assessment was not made until 1900.

The table on the following page gives the assessment of Boston from 1900 to 1908.⁴

During the first five years the city paid 50 per cent of the total assessment. The apportionment commission of 1905, however, no longer bound by the statute, raised the share of Boston to 62 per cent.⁵ The assessments of 1900 and 1901 were not paid until 1902, interest, amounting to \$24,334.22, being charged on

¹ *Mayor's Inaugural* (1900), p. 68.

² *Mass. Public Documents*, no. 48 (1908), pp. 39, 40.

³ *Bonds Issued, Sinking Funds, etc. of Metropolitan Districts*, p. 10.

⁴ *Auditor's Report* (1908), p. 228; *Mayor's Inaugural* (1907), Appendix, p. ii.

⁵ *Mayor's Inaugural* (1906), p. 17.

Year	Amount
1900	\$258,961.59
1901	285,448.59
1902	309,709.50
1903	314,538.27
1904	346,581.67
1905	360,279.74
1906	620,044.95
1907	579,316.57
1908	634,583.07

Total (including interest)..... \$3,733,798.17

these deferred payments. Chapter 325 of 1902 allowed cities and towns in the district to issue bonds for any part of the assessments of 1900 and 1901. Boston as well as many other towns and cities in the district took advantage of this permission, the city issuing bonds for \$420,400.¹

After the close of the period the metropolitan park assessments were increased considerably by the construction of the Charles River Basin. Chapter 465 of 1903 authorized the building of a dam across the Charles River, at the site of the old Craigie Bridge. The construction was to be carried on by a special commission, but the care of the dam and basin after completion was to be intrusted to the metropolitan park commission. The cost of the improvement, according to the provisions of the act of 1903 and subsequent acts, was to be apportioned by the commissioners next appointed to apportion the charges of the metropolitan park system. Since the new dam was to serve as a highway, Boston and Cambridge would be called upon to pay such part of the cost as would represent the cost of removing the old bridge and constructing a suitable bridge in its place. The remainder of the cost was to be assumed by the metropolitan parks district; and assessments to cover interest and sinking fund requirements and cost of maintenance were to be levied in the same manner as those for other metropolitan parks.

By chapter 402 of 1906 the commission was given power to construct an embankment and park upon the Boston side of the basin, the cost to be met by the city. Within two years after the

¹ *Finance Commission*, ii, p. 164.

completion of the embankment the commission was to levy special assessments for the benefit of the city, the amount thus assessed not to exceed one-half the cost.

The \$565,000 expended directly by the city in 1908 was less than one-half the total park expenditure. With the further extension of the metropolitan park system, it was unlikely that additions would be made to the city's own system. The establishment of the metropolitan district is an example, more and more common in recent years, of state administration of local activities.

Streets. The expenditure for streets and kindred objects made up 32.5 per cent of the total expenditures of the city in the years 1903 to 1906, compared with 29.5 per cent in the years 1883 to 1886. The per capita charge advanced in the meantime from \$9.75 to \$15.94. The gradual yielding of the policy of retrenchment pursued in the preceding period to one of increasing expenditures is well shown by the course of street expenditure. Little advance was made before 1890 when street expenditures amounted to \$3,762,147. The next few years, however, saw a rapid rise to \$8,838,090 in 1897, and then a more gradual one to \$9,964,020 in 1903. The great expenditure of \$9,382,860 made in 1873 was not equaled until 1899. After 1903 street expenditures decreased. The greatest decline was from \$7,926,930 in 1907 to \$6,226,111 in 1908.

Streets Proper. The expenditure for streets proper was practically stationary until 1890 when a sudden increase took place. From \$1,334,644 in 1890 the expenditure rose to \$1,915,225 in 1891 and \$4,644,128 in 1897. From 1897 to 1903 the expenditures were again stationary, but after 1903 they fell steadily, reaching \$1,497,599 in 1908.

The period began with a large amount of much-needed construction and repairs confronting the city, a legacy from the long period of retrenchment. The work of street construction, it will be remembered, had always been exceedingly expensive to the city. Streets were laid out generally by private owners, to be accepted or rejected by the city. This method was necessarily a haphazard one, resulting in a network of highways devoid of

system. It was evident to Mayor Matthews that no more money ought to be expended until a method insuring system had been devised, and the privilege of special assessment extended.¹ The Mayor's recommendations, outlined in his inaugural of 1891, led to the passage of chapter 323 of that year. This act authorized the mayor, subject to the confirmation of the board of aldermen, to appoint three men to serve as a board of survey. The board was to make plans of such sections of the city as it saw fit, showing present streets and also the locations of streets which, in its opinion, would some day be deemed necessary. The life of this board, fixed by the act at three years, was at the expiration of that time, extended another three to May 1, 1897.² The projected highways were not to be laid out by the street commissioners until they were petitioned by a majority in interest of the owners lying within 125 feet of the proposed locations or until the laying out should be authorized by the city council.

The assessable cost of the new street was to be determined by the street commissioners. This excluded the cost of water pipes, gas pipes, and connections and the cost of laying them. This assessable cost was to be levied upon the owners of property within the 125 foot limit, each one paying in proportion to the benefit received. The act of 1891 apparently increased greatly the privilege of special assessment. Hitherto the city had possessed the powers conferred by the act of 1866 and its amendments which limited the assessment to one-half the special benefit conferred.

The financing of street construction was provided for in a rather ingenious way. The city might issue ten-year bonds outside the limit, not more than one million dollars to be issued each year. The total issue was never to exceed by more than three millions of dollars the amount of the sinking funds. The assessments would be turned into the sinking funds, and would thus provide the funds for the construction of miles of streets, on a working capital of only three millions of dollars.

But the act of 1891 was not given a fair trial. Its enforcement was bitterly opposed by the large real estate interests. This

¹ *Mayor's Inaugural* (1891), p. 10.

² *Acts*, 1894, ch. 335.

class was not going to yield privileges so long enjoyed. The results of their opposition are seen in the amendments which in succeeding years modified the act of 1891. Chapter 418 of 1892 reduced the assessable cost, by requiring the subtraction from the actual cost, in addition to the charges which might be deducted under the act of 1891, of the cost of sewers in excess of four dollars a foot, and of the cost of constructing that part of a highway which was in excess of fifty feet in width. It also specifically conferred the right of appeal to the superior court. Chapter 433 of 1899 limited the assessment upon each piece of real estate "to the value of the benefit or advantage beyond the general advantage to all real estate in said city received by the land thereof."

The act of 1891 was declared unconstitutional by the Massachusetts supreme court in 1902 on the ground that a special betterment tax must in this state be founded upon benefits to the property. The loss to the city because of this decision was estimated by Corporation Counsel Babson as at least \$14,000,000.¹ Boston at once applied for new legislative authority. Chapter 521 of 1902 was passed, reducing the assessable cost to one-half its former figure, and providing that the assessment should in no case exceed the special benefit. The attempt to relieve Boston of a burden not borne by many large cities resulted in failure. The amounts actually assessed were seldom equal to those permitted by the statute, the commissioners fearing that the law would eventually be held unconstitutional. They had, accordingly, followed the custom of assessing only to the extent of the benefit. From the passage of the act of 1891 to January 31, 1901 there was expended under this act \$7,696,000. The assessments levied to offset this cost amounted to only \$1,937,000.²

Although it was evident, even at the time of its enactment, that the act of 1891 would not secure all the economies it promised, the city had no choice but to proceed with improvements long deferred. The rise in the expenditure for streets, particularly in the expenditure for widening and extending, after 1890

¹ Letter of Corporation Counsel Babson, *Boston Transcript*, March 22, 1909.

² *City Documents*, no. 83 (1901), p. 17.

was very rapid. In 1891 only \$165,537 was expended in the widening and extending of streets; in 1897 the amount rose to \$2,918,843. After 1897 this branch of expenditure fell off, being only \$663,617 in 1908.

The money expended on street improvements during this period came largely from loans. From 1891 to 1908 the city expended \$55,000,000 upon her streets. Of this amount, \$31,000,000 was paid for out of loans, \$17,000,000 outside the debt limit and \$14,000,000 inside the limit. The indebtedness incurred outside the limit was for streets built under the act of 1891 and its amendments and for certain improvements authorized by special acts, such as those connected with the building of the South Station¹ and the construction of Blue Hill and other avenues.²

The limit of \$3,000,000 in excess of the sinking funds, imposed by the act of 1891, was subsequently raised to \$6,000,000;³ but the smallness of the assessments collected permitted but \$9,500,000 to be raised outside the debt limit.⁴ The legislature later authorized the issue of bonds inside the debt limit. Chapter 478 of 1900 gave permission for the appropriation from loans inside the limit for the construction of streets already laid out, and chapter 199 of 1901 extended the privilege to streets laid out in the future. In 1906 the legislature in chapter 214 stipulated that all future improvements should be paid from taxes, or from loans within the debt limit, "except those ways constructed under some special act in which a contrary provision is made." No special act of this kind was passed after 1903. The fall in street expenditure from \$4,154,766 in 1903 to \$1,497,599 in 1908 shows the decrease in the funds available for this purpose.

An unfortunate result of the limitations placed upon the city's financial powers is seen in connection with street expenditures. The tax limit prevented adequate appropriations for street purposes from taxation. The only recourse left was to ask the legislature for permission to borrow, since loans could not be made within the limit, according to the provisions of chapter 206 of

¹ *Acts*, 1896, ch. 516.

² *Ibid.*, 1895, ch. 334.

³ *Ibid.*, 1897, ch. 319; *ibid.*, 1901, ch. 465.

⁴ *Auditor's Report* (1908), p. 219.

1891, unless the mayor should certify that they were not for current expenses, or that they were for current expenses, but were required by public necessity. Consequently, the city was forced at times by these limitations to permit street surfaces to wear out completely, so that their renewal might be deemed an extraordinary expenditure, to be met by borrowing.¹

For some years the custom was followed of appropriating money for reconstruction in equal sums among the various wards of the city, regardless of the needs of the different localities. This practice was rightly condemned as wasteful by the superintendent of streets in 1898.²

The causes of wasteful expenditure were found in street work more than in any other municipal activity. The investigations of the finance commission of 1907 showed that day labor was in many kinds of work more expensive than contract work. It was found, for instance, that the working of its own stone-crushing plants had resulted in an annual loss of about \$100,000 to the city.³ Crushed stone, which could be bought at \$1.10 a ton, cost the city \$1.47 in 1905, \$2.85 in 1906, and \$3.24 in 1907.⁴

The loss due to the granting of contracts without competition was also great. In the years 1902 to 1906 the city lost \$70,000 in contracts for bitulithic pavements, given without competition at prices nearly 50 per cent greater than the competitive price. Asphalt pavements cost the city \$2.50 per square yard, at least \$0.75 above the competitive cost of such pavements in Boston.⁵

One of the chief causes of the greater cost of day labor was the presence of an excessive number of men, many of them old, on the payrolls. Until 1897 the employees of the street department had been hired only when their services were needed, a practice which had caused much embarrassment, inasmuch as it was necessary to reduce the force during the winter months.⁶ In that year a permanent force was adopted. The size of this force was, under political pressure, increased beyond the needs of the department. Much of this waste could have been avoided by the elimination

¹ *Mayor's Inaugural* (1897), p. 72.

² *City Documents*, no. 34 (1898), p. 8.

³ *Finance Commission*, ii, p. 3.

⁴ *Ibid.*, i, p. 212.

⁵ *Ibid.*, ii, p. 207.

⁶ *Mayor's Inaugural* (1897), p. 70.

of politics. The problem of dealing with aged employees was, however, one that required special consideration. Soon after the close of the period provision was made for pensions. This method was humane and at the same time economical. The old method of paying men for work not done was costly to the city and demoralizing to the worker.

The chance for economy in the expenditure for streets was very great. About \$60,000,000 was expended for streets during this period, an average annual expenditure of \$2,700,000. The experts employed by the finance commission of 1907 estimated that 20 per cent of the money appropriated for streets was wasted on account of lax methods of administration.¹ The magnitude of street expenditures would thus have permitted an annual saving of over \$500,000 in this branch alone.

Lighting. The expenditure for lighting rose from \$524,923 in 1886 to \$809,510 in 1908. Throughout this period as in preceding years the impression prevailed that the city was paying too much for its lighting. As the result of frequent agitation, the lighting contracts were, it is true, constantly lowered, but the terms given the city were probably not as liberal as the decrease in the cost of manufacture warranted.

The alternative of a municipal lighting plant was almost constantly before the city government. Chapter 370 of 1891 gave permission to towns and cities to manufacture gas or electric light for their own use and for private distribution. In the case of cities the step could only be taken after an affirmative vote of two-thirds of the members of the city council and the approval of the mayor in two successive years, followed by a referendum to the voters. Had the act allowed the city to manufacture simply for its own use, it is probable that it would have stood a much better chance of adoption. Mayor Matthews in 1893 pointed out this weakness, and attempted to secure the desired change. Subsequent amendments did not, however, give the city power to light its own streets, without also supplying private consumers. The city council of 1905 voted to submit the question to the voters, but the council of 1906 failed to give the re-

¹ *Finance Commission*, iii, p. 1178.

quired vote.¹ A committee appointed in 1906 after holding a number of public hearings reported unfavorably on municipal lighting.²

The following table shows the change which took place in the character of the lighting during this period.³

Year	Gas	Oil	Naphtha	Electric	Total
1886	10,139	2,785	...	501	13,425
1908	11,660	...	1,075	3,833	16,568

It will be noticed that the total number of lamps increased but little. The city, however, was much better lighted in 1908 than in 1886 owing to the substitution of the electric arc lamp in many places for the gas lamp and the introduction of improved gas lamps. The great uncertainty as to the best method of lighting, so constant was the advance in this field, made it inadvisable for the city to enter the lighting business. The finance commission of 1907, though not discussing the question of municipal lighting, advised the city government to offer every possible opportunity for testing the various lights.⁴

Sewers. From 1887 to 1896 the expenditure for sewers was not large, averaging about \$650,000 a year, but with 1897 it rose rapidly, averaging approximately \$1,850,000 in the years 1897 to 1908. The cause of this advance was the necessity of extending and improving the sewerage system. The preceding period had seen the establishment of intercepting sewers which carried the sewage far down the harbor. But much remained to be done, such as the construction of sewers in the suburbs, the disposal of surface drainage, and the improvement of the common sewers in the old part of the city.⁵

The first problem which confronted the sewer department was the reconstruction of the channel of Stony Brook. Authority was secured under chapter 428 of 1887 to borrow \$500,000 outside the debt limit for the construction of the lower section of the brook. This work was completed in 1889 at a cost of \$1,100,000.

¹ *Mayor's Inaugural* (1906), p. 51.

² *City Documents*, no. 86 (1906).

³ *Auditor's Report* (1908), p. 273.

⁴ *Finance Commission*, i, p. 382.

⁵ *City Documents*, no. 14 (1890), pp. 1, 2.

In 1895 a further section of the channel was improved by the New York, New Haven and Hartford Railroad.¹ In 1896 the continuation of the improvement was carried on under chapter 530 which allowed the city to issue an additional \$500,000 loan outside the debt limit. Chapter 397 of 1899 authorized \$350,000 more outside the limit. Under this last act the improvement was continued to the Jamaica Plain Station. The total expenditure on account of the brook amounted to about \$2,100,000 during this period. Stony Brook had cost the city in all over \$2,500,000.

Except for the expenditure on Stony Brook, the sewer department was very much limited in appropriations down to 1897. The tax limit prevented the securing of large amounts from taxation; the special assessment contributed but little; and the borrowing capacity of the city inside the debt limit was small. Permission to issue \$500,000 outside the debt limit, secured under chapter 322 of 1889, added but little to the resources of the department. Sewers in the new streets were, however, constructed after 1891 by the street laying-out department under the provisions of the great chapter 323.

This lack of funds made it impossible for the city to deal adequately with the sewerage problem. About 1896 efforts were made in the legislature to transfer all control of the city's sewerage works to the new metropolitan board of sewerage commissioners on the ground that the city had proved its inability to manage its own system. The necessity of immediate action led the city to make a careful study of the situation. The result was the framing of a bill which was subsequently enacted by the legislature of 1897 as chapter 426.² This act granted the city permission to issue bonds outside the debt limit to the extent of \$1,000,000 a year. Though the act also extended the privilege of special assessment, subsequent amendments much limited its importance.

The total expenditure for sewers, excluding the metropolitan sewer assessments, in the twelve years following the passage of the act of 1897, amounted to about \$20,500,000. Of this amount, \$15,831,300 was obtained from loans, leaving approximately

¹ *City Documents*, no. 29 (1897), p. 18.

² *Ibid.*, no. 35 (1899), p. 22.

\$4,700,000 to be contributed by taxation, an average of \$390,000 for the years 1897 to 1908. As most of this \$390,000 was demanded for current expenditures, it is evident that practically the entire cost of new sewerage was met by borrowing.

Of the \$15,831,300 obtained from loans, \$15,014,000 was borrowed outside the debt limit and \$817,300 inside the limit, while \$555,000, the greater part of that obtained inside the limit since 1897, was issued in 1908. This change in policy was required by chapter 204 of 1908 which stipulated that all future loans for sewerage works should be inside the debt limit.

The debt issued outside the limit was authorized by various acts which can be separated into three groups, according to the purpose of the expenditure.¹ The most important was chapter 426 of 1897 and its amendment, chapter 450 of 1899. The first act which allowed the issue of bonds to the extent of \$1,000,000 a year resulted in the creation of a debt of \$10,449,000. The second which amended the act of 1897 in various ways especially in the matter of assessments, provided that bonds might also be issued outside the limit for the repayment of assessments collected under the first act and subsequently declared illegal.² Altogether, \$415,000, the amount repaid on account of these assessments, was borrowed under authority of the act of 1899, making a total of \$10,864,000 obtained under this first group of statutes. A second group of acts, authorizing the Stony Brook improvement, was responsible for \$850,000 more.

The remaining amount, \$3,300,000 was issued for the purpose of separate systems of drainage under chapters 383 of 1903 and 485 of 1907. The problem of dealing with the surface water was the greatest one that confronted the sewer department at the end of the period. The intercepting sewers could not be expected to carry off all the water that entered them during rains. The overflow at such times was carried to the nearest arm of the harbor, a pollution that endangered the health of the city.³

The plan which Boston was following at the close of the period was one already adopted by a number of cities, that of installing

¹ *Auditor's Report* (1908), pp. 219-221.

² *City Documents*, no. 38 (1900), p. 12.

³ *Finance Commission*, iii, p. 882.

an entirely separate system for the care of the surface water. The surface drainage could then be discharged in the nearest body of water. In this way the pollution of the upper harbor would be avoided, and the strain upon the old sewerage system removed. After the passage of the act of 1897 a considerable amount was expended for surface drains.¹ This expenditure was finally made obligatory upon Boston by chapter 383 of 1903 which required that all cities and towns using any part of the metropolitan sewerage system should annually expend one-twentieth of 1 per cent of their assessed valuation for the construction of a separate system of drainage. Since part of Boston fell within the territory tributary to the metropolitan sewerage system the city was compelled to expend annually about \$600,000 for this purpose.²

The building of a separate system was hastened by the Charles River improvements. It was clear that sewage overflows ought to be excluded from the new basin. As a large part of the metropolitan sewerage district was included in the Charles River drainage district, the legislature of 1907 in chapter 485 provided that the city should annually expend an amount equal to one-twentieth of 1 per cent of its assessed valuation for the construction of a separate system of sewerage in the Charles River basin drainage district. This act was to supersede that of 1903 in the case of Boston.

At the close of the period it seemed very likely that in the next decade or two Boston would provide a separate system of drainage for the entire city. The engineers of the Charles River dam commission estimated the cost of making the improvement within the Charles River water-shed at \$8,593,500 and outside this district at \$16,193,100, approximately \$25,000,000 for the entire city. A large amount of work had been done already, though not in a systematic way.³

Municipal waste and corruption found a very good field in the sewer department. The experts employed by the finance commission estimated the annual loss on this account during the administration of 1906 and 1907 at \$400,000, or 23 per cent of the

¹ *City Documents*, no. 40 (1906), p. 90.

² *Finance Commission*, iii, p. 886.

³ *Ibid.*, pp. 893, 894.

total expenditures for sewers. Of this loss, \$350,000 was attributed to the inefficiency of the day labor system, the remainder to "gift contracts."¹

After 1891 the expenditure for sewers was augmented by the payment of assessments levied on account of the metropolitan sewerage district. This district, the earliest of the three great metropolitan systems which deal in a comprehensive way with the sewerage, park, and water requirements of a large area, was established in 1889 by chapter 439 of that year. The task of building and maintaining the system was intrusted to a commission of three men, appointed by the governor. This board, known as the metropolitan sewerage board, was in 1901 consolidated with the metropolitan water board.² The cost of constructing the sewers was to be met by borrowing, the loans to be "deemed a pledge of the faith and credit of the Commonwealth."³ The sinking fund and interest requirements and the maintenance charges were to be met by assessments upon the towns and cities in the district, their respective proportions to be determined every five years by commissioners appointed by the supreme judicial court.

The area to be served by the metropolitan sewers was divided into two parts, one comprising certain cities and towns north of the Charles River, among them Cambridge, Somerville, Arlington, Chelsea, and parts of Boston, the other including certain cities and towns lying principally to the south of the Charles River — Waltham, Newton, Watertown, Brookline, and parts of Boston. Chapter 406 of 1895 authorized the construction of a third system, the Neponset River Valley system which was to include Dedham, Hyde Park, Milton and part of Boston. The two systems south of the Charles River were consolidated in 1899 under the name of the south metropolitan system.⁴

The system south of the Charles was put into operation in 1892, discharging into the city's main drainage system on Huntington Avenue.⁵ In 1895 the north system began discharging sewage

¹ *Finance Commission*, iii, p. 1065.

³ *Ibid.*, 1889, ch. 439, sec. 12.

² *Acts*, 1901, ch. 168.

⁴ *Ibid.*, 1899, ch. 424.

⁵ *City Documents*, no. 220 (1894), p. 63.

into the harbor from its own pumping station on Deer Island.¹ The north system cared for the disposal of sewage from Charlestown and East Boston. The Neponset River Valley sewer was completed in 1902, entering the main drainage works of the city.

The service of the south metropolitan system was greatly extended in 1904 by the opening of a high level gravity sewer designed to carry practically all the sewage of the district to two points of discharge near Nut Island in Quincy.² By 1906 the only part of the district discharging into the main drainage system of Boston was that comprising Dorchester and Milton, an area which could not be economically connected with the metropolitan sewer.³ The construction of the high level sewer relieved the pressure upon the city's own system considerably. The change practically brought to an end, however, the annual payments made to the city for the use of its system. These had risen from \$23,000 in 1892 to \$86,000 in 1904; in 1908 only \$7,700 was received.

The cost of constructing this great system amounted in 1908 to practically fifteen millions. Of this, \$6,171,000 was expended on account of the north metropolitan system and \$8,741,000 for the construction of the south metropolitan.⁴ On May 1, 1908 the net metropolitan sewerage debt stood at \$13,695,519.⁵ In determining the proportion of the charges to be borne by each city and town in the district the commissioners appointed by the supreme court adhered to the rule of distributing the interest and sinking fund charges in accordance with the assessed valuation, as determined by the commonwealth for the purpose of levying the state tax. The cost of maintenance and operation they distributed in proportion to population. If only a part of a city or town was within the district, only a proportionate part of the valuation and population was taken.⁶ The percentages of the

¹ *Bonds Issued, Sinking Funds, etc. of Metropolitan Districts* (1905), p. 19.

² *Ibid.*

³ *Mass. Public Documents*, no. 57 (1906), p. 54.

⁴ *Ibid.*, no. 57 (1908), p. 144.

⁵ *Assessments for Interest, Sinking Funds and Maintenance of the Metropolitan Districts* (1908), p. 16.

⁶ *Mass. Public Documents*, no. 57 (1901), pp. 297-300.

total cost imposed upon Boston by the various commissions are given in the following table.

NORTH:	1891-5	1896-1900	1901-5
Interest and sinking fund	20.45 %	18.96 %	16.89 %
Maintenance.....	22.65	22.82	20.66
CHARLES RIVER:			
Interest and sinking fund	23.02	27.08	...
Maintenance.....	25.05	26.41	...
NEPONSET RIVER			
Interest and sinking fund	...	23.28	
Maintenance.....	...	28.14	...
SOUTH: Including Charles and Neponset River Sys- tems after 1899:			1900-4 1905-9
Interest and sinking fund	...	...	42.42 % 39.98 %
Maintenance.....	...	...	43.30 46.52

In its report for 1905 the metropolitan water and sewerage board suggested that, as all commissions had employed the same bases of apportionment, the legislature should make these permanent, and so save the cost of future commissions.¹ Chapter 369 of 1906 was accordingly enacted, providing that the taxable valuation, as last established for the apportionment of state taxes, be used in the case of sinking fund and interest allotments, and that population, as determined by the last state or federal census, be made the basis for the apportionment of maintenance and operation requirements. In accordance with these principles the board was to determine annually the proportion which each city or town should pay. As previous awards were not to be affected, the proportions established for the south metropolitan district would remain in force until 1909.

The total assessments for the year 1907 amounted to \$774,308. Of this, \$270,448 was required for the north metropolitan system and \$503,860 for the south metropolitan system. The requirements of the north system were: for interest, \$123,858; for the sinking fund, \$53,144; and for maintenance, \$93,445. For the south system, the requirements were: for interest, \$367,726; for the sinking fund, \$48,198; and for maintenance, \$87,934.² The city's share of the total assessment was \$254,346 or 32.8 per cent,

¹ *Mass. Public Documents*, no. 57 (1906), p. 71.

² *Ibid.* (1907), p. 62.

\$47,151 for the north metropolitan and \$207,194 for the south. For the north system her proportion of the interest and sinking fund requirement was 16.4 per cent or \$29,117, her proportion of the maintenance requirement, 19.2 per cent or \$18,034. For the south metropolitan system Boston paid for interest and sinking fund charges \$166,287, for maintenance, \$40,907, the proportions being 39.98 and 46.52 per cent, respectively.

The following table gives the total amounts which Boston paid annually as her share of the metropolitan sewerage assessments.¹ The annual charge grew steadily until in 1908 the metropolitan sewerage charge amounted to about one-sixth of her expenditure for sewers.

Year	Amount	Year	Amount
1892	\$12,625	1900	\$129,773
1893	21,905	1901	126,662
1894	46,517	1902	110,330
1895	59,702	1903	139,178
1896 ²	.....	1904	218,933
1897	146,601	1905	254,745
1898	75,421	1906	226,355
1899	95,753	1907	254,346
		1908	262,095

Bridges. The continual demand for more bridges and the replacement of the old wooden ones by modern structures is responsible for the increase in expenditures from about \$200,000 the first of the period to about \$700,000 during the last. The first great expenditure was for Harvard Bridge which was opened for travel September 1, 1891.³ It was under the provisions of chapter 155 of 1882 and its amendments, notably chapter 282 of 1887, that the bridge was constructed. The cost of constructing such part of the bridge as lay upon its own side of the Charles River was to be borne by Cambridge and Boston, respectively. The cost of building that part which lay between the harbor lines was, however, to be divided equally between the two cities. The cost of maintenance was to be divided in the same way. The share of Boston amounted to about \$260,000, and \$250,000 of

¹ *Auditor's Report* (1908), p. 228.

² Included in 1897.

³ *City Documents*, no. 11 (1892), p. 25.

this amount was provided by a loan authorized outside the debt limit.

From 1896 to 1899 the city was engaged in building the Charlestown Bridge.¹ This bridge which also carried the elevated railway was built by the Boston transit commission. The cost was about \$1,500,000, of which \$1,300,000 was charged to the account of bridges and the remainder to the appropriation for the transit commission.

The last great undertaking was the replacement of the old West Boston Bridge by a magnificent structure, over which the Cambridge subway trains were to run. According to the legislative acts which provided for its construction, the Boston Elevated Railway Company was to pay toward the cost of construction "such portion thereof as shall be rendered necessary by reason of its being of additional size and strength for the use of the elevated railroad,"² besides paying for constructing its railway, both elevated and surface, across the bridge. The balance of the cost was to be divided equally between Boston and Cambridge. The bridge was to be constructed by a commission consisting of the mayors of the two cities and a third person appointed by them. The bridge was completed in 1907,³ the share of the cost borne by Boston amounting to about \$1,500,000. This was met by a loan outside the debt limit, as provided in chapter 467 of 1898. As in the case of Harvard Bridge, the cost of maintenance was divided equally between the two cities.

During this period a large amount was expended for abolishing grade crossings. The greater part of the expenditure was paid back to the city by the state and the railroad company concerned.

Ferries. The expenditure for ferries increased from about \$225,000 during the first five years of the period to about \$275,000 during the last five years. The rise in expenditure from \$221,813 in 1895 to \$345,163 in 1900 was the result of the expenditure of \$500,000, borrowed outside the debt limit, for the purpose of improving the ferry accommodations which had become inad-

¹ *Mayor's Inaugural* (1900), p. 107.

² *Acts*, 1897, ch. 500, sec. 15.

³ *City Documents*, no. 17 (1908), p. 17.

quate.¹ The management of the ferries was improved in 1891, when the board of directors was replaced by a superintendent.² In 1895 the department was abolished, the care of the ferries being given to the superintendent of streets.³

Health. The expenditure for public health at the end of the period was almost three times what it was at the beginning, rising from \$611,381 in 1887 to \$1,763,917 in 1908. The watering of the streets previous to 1891 was done almost entirely by private contractors who made agreements with the abutters. The lack of systematic watering and the exorbitance of the rates charged provoked agitation which led to the passage of chapter 179 of 1891. This act provided that any city, the population of which exceeded thirty thousand, might annually appropriate money to water all or any of the public streets within its limits. The whole or any part of the cost might be assessed upon the abutters.

For years the street department, unauthorized by any ordinance, had spent from its regular maintenance appropriation a small sum for street watering. In 1891 the amount thus expended was \$54,000. To this amount the city council in that year added \$50,000, the first specific appropriation for street watering.⁴

Boston did not adopt the plan of watering all her streets. So much resistance was made to the proposal that the city levy assessments that the city council gave up the idea of compelling the abutter to meet any part of the cost. At the same time the city did not see its way clear to provide the funds from the nine-dollar tax levy.⁵ The plan was, accordingly, adopted of watering the macadamized streets only, leaving to those abutting on other streets the old method of dealing with contractors. This was the system down to 1898 when, under chapter 419 of 1897 which replaced the law of 1891, the city began to water all its streets. Special assessments were levied at the rate of five cents for every front foot upon all estates within four miles of the city hall

¹ *Acts*, 1895, ch. 435.

² *City Documents*, no. 220 (1894), p. 158.

³ *Acts*, 1895, ch. 449, sec. 25.

⁴ *City Documents*, no. 36 (1892), pp. 68-71.

⁵ *Ibid.*, no. 44 (1892).

abutting on public highways. Beyond the four-mile radius the entire cost fell upon the city. In 1899 the method of assessment was modified, the charges varying in the different districts in accordance with the amount of service given.

The proceeds from the assessments were sufficient to cover almost the entire cost to the city during the three years, 1898, 1899 and 1900 in which they were collected. In 1900 in accordance with the recommendation of the mayor the system of special assessments for street watering was given up, the entire cost after that year falling upon the city.¹ Thus Boston gave up a source of receipts which many cities enjoyed. This action was a good example of the readiness of the citizens to burden the general tax levy. It is especially interesting as coming shortly after the passage of the law raising the tax limit from nine dollars to ten dollars and fifty cents.

An important cause of the increase in expenditure for public health after 1896 was the remarkable development of the system of public bath houses and gymnasia. The extension of this branch of municipal service which, besides being a source of great pleasure, improved the conditions of cleanliness and health in many districts² was due to the efforts of Mayor Quincy. He looked upon the providing of public baths as one phase of the general obligation of a city "to secure, in some measure, the enjoyment by all of at least a certain minimum of elementary social advantages."³ As a result of the policy inaugurated by Mayor Quincy, the expenditure for public baths rose from about \$20,000 in 1896 to about \$240,000 in 1908.

Another cause of the increase after 1896 was the adoption of better methods of street cleaning and refuse disposal. Up to 1898 garbage had been disposed of by the insanitary methods of dumping at sea, or of selling it to be fed to swine. In that year under authority conferred upon towns and cities by chapter 377 of 1889, a contract was entered into with the New England Sanitary Product Company, whereby the city was to pay the company about \$50,000 annually for a term of ten years for disposing of its

¹ *City Documents*, no. 62 (1902), p. 180.

³ *Ibid.*, no. 3 (1899), p. 13.

² *Ibid.*, no. 5 (1903), p. 3.

garbage by the process of reduction.¹ Although public opinion had been gathering force for some years against the old methods, it is not unlikely that the great decline in the receipts from the sale of swill, due to the low price of pork, hastened the change.²

A further improvement introduced into part of the city in 1899 was the separation of ashes from "papers and light combustible waste" and the delivery of the latter to the plant of the City Refuse Utilization Company, under a contract by which the city paid the company \$5,500 annually.³ These changes left only the ashes, street dirt and other heavy refuse which could be safely disposed of at sea. The work of collecting refuse was done almost entirely by the city.

Library. The last period closed with construction upon the new library building suspended. In May, 1888, however, work was resumed in accordance with plans calling for a much finer building.⁴ The new home of the Boston Public Library was opened in March, 1895. The cost of the building was \$2,450,000, a figure much above the original estimates.⁵ Of this amount, \$2,000,000 was obtained from loans outside the debt limit under authority of chapters 68 of 1889 and 324 of 1891. The old library building on Boylston Street was held by the library trustees until February, 1899, when it was sold for \$850,000. The proceeds, in accordance with chapter 68 of 1889, were turned over to the board of commissioners of the sinking funds.⁶

After the construction of the new building the expenditures remained practically constant. The average for the period 1903 to 1906 was \$330,623, or 1.1 per cent of the total expenditures of the city. The per capita figure for the same period was fifty-six cents. The library was the only branch that had shown no advance in per capita expenditure during the half-century.

Schools. The expenditure for schools maintained throughout the period a fairly steady rate of increase, rising from \$1,915,426

¹ *Mayor's Inaugural* (1898), pp. 39-45.

² *Ibid.* (1897), p. 81.

³ *City Documents*, no. 38 (1899), p. 121; *Mayor's Inaugural* (1899), p. 141.

⁴ *Ibid.*, no. 220 (1894), p. 73.

⁵ *Ibid.*, no. 18 (1896), p. 6.

⁶ *Ibid.*, no. 23 (1900), p. 3.

in 1887 to \$4,732,611 in 1908. There was only one break in this movement. During the very great activity in schoolhouse construction expenditures rose from \$4,314,147 in 1902 to \$4,998,766 in 1903, and \$5,739,510 in 1904, to fall to \$4,711,655 in 1905. The relative importance of school expenditure increased during this period, rising from 14.9 per cent of the total expenditures in the years 1883 to 1886 to 17.3 per cent in the years 1903 to 1906. Meanwhile the per capita figure advanced from \$4.94 to \$8.48.

The chief item of school expenditure, the salaries of the instructors, rose very gradually from \$1,238,584 in 1887 to \$2,927,032 in 1908.¹ The only increase of importance in the scale of remuneration came in 1896. It was not a large increase, raising, for example, the maximum salaries of the first assistants in the grammar schools from \$1,080 to \$1,212. During the latter part of the period there was considerable agitation for further increases to offset the advance in the cost of living. In 1889 the position of the teachers was improved by making their tenure permanent, subject only to removal by the school committee, in place of the old method of annual election. Though the teachers practically never failed of reelection, the uncertainty was harmful.²

A further improvement was made in 1900 by chapter 237 which established a teachers' retirement fund. All teachers entering the service of the city after the passage of the act and those already in its service who chose to take advantage of its provisions were to have deducted from their salaries eighteen dollars a year. Teachers who had taught thirty years, at least ten in the public day schools of the city, were upon retiring to enjoy a monthly payment from the fund. This privilege also extended to those incapacitated for teaching who had taught at least two years in the city of Boston. Ordinarily no annuity was to be paid unless the beneficiary should have contributed an amount equal to the assessments of thirty years — \$540. This fund permitted the payment of a small annuity. On January 31, 1909, 2,061 teachers were contributing to the retirement fund and 143 annuitants were each receiving \$180 a year.³

¹ For a detailed analysis of school expenditures see page 365 of the appendix.

² *Finance Commission*, i, p. 61.

³ *City Documents*, no. 46 (1909), p. 127.

Entirely separate, was a pension fund established under authority of chapter 589 of 1908 which provided that teachers who had reached the age of sixty-five years, or had served in the public day schools for thirty years, twenty of these in the schools of Boston, should be entitled to a pension not exceeding \$180 a year. Smaller pensions were to be paid in proportion to the length of service. To provide the money, the school committee was authorized to appropriate an amount equal to five cents on every thousand dollars of taxable property in addition to the amount already permitted for school purposes. The same act raised the general tax limit of the city by five cents, making it \$10.55.

During this period important changes were made in the powers and constitution of the school committee. It was a constant source of irritation to the city council that the committee should have the power of really making its own appropriations. The committee often exceeded the sum allotted to it by the city council. This independence naturally became all the more irritating after the imposition of the tax limit. Attempts were made to bring the committee under the power of the mayor or city council. In his inaugural of 1898 Mayor Quincy stated that, in his opinion, the best results would be obtained, if the mayor were given the power of appointment, thereby placing the committee on exactly the same basis as the other executive departments. But, as he saw no hope of securing such a law, he suggested other plans, the purpose of which was to keep the expenditure of the committee within certain fixed limits.¹

One of these plans was incorporated in chapter 400 of 1898. This act provided that before the first day of March in each year the school committee of the city of Boston, by vote of two-thirds of all its members, was to "make appropriations for the support of the public schools of said city for the financial year, including repairs and alterations on school buildings."² The appropriations were to be made by items specifying the purposes for which the money was to be expended. These appropriations were to be included within the tax limit, but could not exceed for the year

¹ *Mayor's Inaugural* (1898), p. 22.

² *Acts*, 1898, ch. 400, sec. 1.

1898-99, \$2.80 upon each \$1,000 of the taxable property of Boston. For the year 1899 the limit was placed at \$2.85, for 1900 and every year thereafter, \$2.90. Not less than twenty-five cents on every thousand dollars of taxable property was to be expended only for repairs and alterations upon school buildings. The votes of the committee were to have the same force and effect as orders or votes of the city council and were likewise subject to approval by the mayor; they could be passed over his veto only by vote of three-fourths of all the members.

This provision gave the mayor for the first time a real check upon the specific appropriations of the school committee; previously he had only had the power of vetoing the general unitemized appropriation for schools as passed by the city council.¹ Although the act took away the nominal control formerly exercised by the city council, it placed a definite limit to the appropriations of the school committee.

The act of 1898 was modified by amendments. After the passage in 1900 of the law raising the general tax limit from \$9.00 to \$10.50 it was not surprising that the limit for school purposes should also be raised. In 1901 chapter 448 placed the limit for 1902 and succeeding years at \$3.40. It was provided, however, that not less than forty cents should thereafter be appropriated solely for new school buildings, lands, yards, and furnishings. Such expenditures had formerly been met almost entirely from loans. In 1902 the school committee appropriated the forty cents, but the order was vetoed by the mayor. In 1903 the necessary two-thirds vote could not be obtained; throughout the period the committee made no further attempt to avail itself of this provision.²

The limit was raised again in 1907 by chapter 295 which authorized the committee to organize physical training during the summer vacation, and allowed it to increase its appropriations from the tax levy by two cents in 1907 and four cents in each subsequent year. Chapter 357 of the same year provided for the appointment of nurses to assist the medical inspectors in the

¹ *Mayor's Inaugural* (1899), pp. 19-25.

² *Finance Commission*, i, p. 368.

public schools, and, to meet this expenditure, allowed an additional \$10,000 in 1907, and in each year thereafter two cents upon each one thousand dollars of assessable property. Chapter 589 of 1908 which established the pension fund raised the tax limit by five cents for both school and general purposes. These various acts made the limit for school purposes \$3.51 in 1908. Of this, forty cents, the amount available for schoolhouse construction, was not used.¹

In this as in former periods one of the greatest problems was to provide adequate school accommodations. The city had not only to deal with a growing school population but also a shifting one. The methods by which it was obliged to acquire land and construct school buildings were costly. Moreover, instead of keeping pace with the demand for new buildings, the city would permit overcrowding for a few years, and then spend large sums in trying to provide adequate accommodations. This method made it almost impossible to meet the cost of construction from taxes, as ought to have been done in the case of such a regularly recurring want. Almost all the money expended for new schools came from loans. The city did not appropriate even the forty cents from taxes as provided in the school acts. This policy was, however, due in part to the operation of the tax limit.

For many years after the incorporation of the city the power to spend money for schoolhouses was vested in the city council, a privilege constantly complained of by the school committee. Their demand for control over a matter which so vitally concerned them led soon after the charter revision of 1854 to the passage of an ordinance which stated that no schoolhouse should be located, erected, or materially altered until the school committee had been consulted — except by order of the city council. This exception soon became the rule. It was not until the last period, by chapters 408 of 1895, 400 of 1898, and 362 of 1899 that the whole control of repairs and the erection of new buildings was transferred to the school committee, subject to approval by the mayor. This

¹ Ch. 388 of 1909, taking effect May 14, 1909, after the close of the period raised the tax limit to \$3.61 for 1909, \$3.71 for 1910 and \$3.81 for 1911 and thereafter. See *Auditor's Report* (1909), p. 246 (note).

added power, with the temptation for corruption, was bad for the school committee. To avoid the possibility of further deterioration of the committee, chapter 473 of 1901 was passed establishing the schoolhouse department.¹

The schoolhouse department was to consist of three commissioners appointed by the mayor, without confirmation. The school committee was to designate annually in which districts new accommodations were necessary and the approximate number of additional pupils to be provided for. Chapter 450 of 1907 instructed the committee to designate the order in which, in its opinion, provision should be made. Then the schoolhouse board was to select the site and ask the street commissioners to take it. This the latter would do either by purchase or by exercising the right of eminent domain. A wise provision in the act of 1901 forbade them to acquire land by private purchase, if the price was more than 25 per cent above its average assessed value during the previous three years. In the opinion of the finance commission, it would have been far better to give the schoolhouse commissioners power to take their own land; they pointed out that the time to make a bargain was prior to the final selection of the site. The street commissioners were often forced to pay a price not only far above the assessed value, but also above prices informally given before the taking.² The bonds to pay for these expenditures were to be issued upon the request of the mayor, approved by a two-thirds vote of the members of each branch of the city council.

Most of the loans providing for schoolhouse construction were authorized by legislative acts and were inside the debt limit. The first special act under which Boston borrowed for schoolhouses was chapter 408 of 1895. This act permitted the borrowing of \$500,000 annually in 1895 and 1896, to be reckoned outside the debt limit, and \$400,000 in each of the three following years to be reckoned within the limit. Chapter 442 of 1897 raised the amount which could be borrowed inside the limit to \$650,000 in 1897 and 1898, respectively. Chapter 149 of 1898 authorized the borrowing of \$850,000 during the next three years, all within the

¹ *Finance Commission*, i, pp. 365, 366.

² *Ibid.*, i, pp. 376-380.

debt limit. Chapter 288 of 1901 authorized \$300,000 more, within the debt limit. The effect of these acts is seen in the advance in expenditures for schoolhouses after 1894 which rose from about \$400,000 in that year to over \$800,000 in 1899. It was evident, however, that even larger expenditures were necessary in order to secure adequate school accommodations. Chapter 473 of 1901, establishing the new schoolhouse department, made provision for much greater borrowing.

This act authorized the borrowing, inside the limit, of not over \$1,000,000 in 1901 and in each of the three years following. The act was amended in 1902 by chapter 386 so that \$1,500,000 might be borrowed in each of the years 1903, 1904 and 1905. Accordingly, \$5,500,000 was borrowed and expended under authority of these two acts, the expenditure for new schoolhouses rising to its highest point in 1904—\$1,919,576. It was expected at the time these acts were passed that the loans provided therein would be sufficient to bring the school accommodations up to date, and that thereafter the forty cents from the tax rate, provided in chapter 448 of 1901, would make further resort to loans unnecessary.¹ Forty cents on every thousand dollars of valuation would have made about \$500,000 a year available for new schoolhouses, and in a few years would have reduced to a small amount the loans for construction. The schoolhouse board stated in 1907 that they could do their work with \$500,000 a year, if only this amount were permanently assured.²

But the \$5,500,000 was not sufficient to complete the task, and the city was unwilling to take forty cents from its tax rate for that purpose. Accordingly, chapter 392 of 1905 was secured, giving the city permission to borrow an additional \$1,500,000 inside the debt limit. This act was followed by chapter 450 of 1907 which provided that Boston might issue bonds for schoolhouses—\$1,000,000 in 1907 and 1908, respectively, and thereafter not over \$500,000 in any one year. All these loans were to be inside the debt limit except the amount by which the combined loans of 1907 and 1908 exceeded \$750,000. The period closed with the school accommodations greatly improved, though still not entirely ade-

¹ *Finance Commission*, i, p. 368.

² *City Documents*, no. 37 (1907), p. 2.

quate. Between 1903 and 1908 the number of children housed in portable schoolhouses or hired premises was reduced from about 10,000 to 2,000.¹

At the close of the period Boston had, under authority conferred by special acts, borrowed for schoolhouses to the extent of \$11,205,000, of which only \$755,000 was permitted outside the debt limit. The sum of \$3,455,000 was borrowed under authority of acts passed before the establishment of the schoolhouse department and \$7,750,000 by virtue of subsequent acts. The finance commission justly condemned the use of the loan for schoolhouse construction, claiming that it bred extravagance.² The restricted tax rate, however, encouraged this loan policy in schoolhouse building as in all works which might be deemed permanent improvements.

This period like former ones saw the extension of the school system into new fields. Particularly rapid was the development of education in the manual and industrial arts. In 1893 a mechanic arts high school was opened which was crowded with pupils from the start.³ In 1908 Boston was planning to build a commercial high school which has since been opened.

The efficiency of the school committee was increased in 1905 by the enactment of chapter 349 of that year. This act reduced the size of the committee from twenty-four members to five.

Water. The expenditure for water showed a moderate increase during this period, rising from \$2,327,706 in 1887 to \$2,695,761 in 1908. The figures for the last part of the period reveal somewhat more regularity than those for the first part, due to the establishment of the great metropolitan water system which took over all of the city's waterworks, her distributing plant excepted. The relative importance of this branch of expenditure decreased, falling from 15.2 per cent in the years 1883 to 1886 to 9.9 per cent in the period 1903 to 1906. The per capita figure fell in the meantime from \$5.02 to \$4.87.

Down to 1895 Boston pursued the policy of securing the necessary increase in her supply by building additional basins for

¹ *Mayor's Inaugural* (1903), p. 7; *Finance Commission*, i, p. 42.

² *Finance Commission*, i, p. 367. ³ *City Documents*, no. 220 (1894), p. 67.

storing the waters of the Sudbury River. By that time, however, it had become apparent that the combined Sudbury and Cochituate supply was insufficient; the quality of the Mystic supply was poor. Other cities and towns in the immediate vicinity were also finding their supplies inadequate.¹ It was only natural that the problem should be solved by the creation of a metropolitan system.

Chapter 488 of 1895, "An Act to provide for a metropolitan water supply," followed in general the provisions found in the acts establishing the other metropolitan districts. The governor, "by and with the advice and consent of the council," was to appoint three water commissioners.² They were to "construct, maintain and operate a system of metropolitan water works substantially in accordance with the plans and recommendations of the state board of health, contained in their report to the legislature of the year eighteen hundred and ninety-five."³ The district to be served included the cities of Boston, Chelsea, Everett, Malden, Medford, Newton and Somerville and the towns of Belmont, Hyde Park, Melrose, Revere, Watertown, and Winthrop. Water might be furnished to any of the above towns or cities, provided that at the time of making application the community should own its water-pipe system. Any other town or city within ten miles of the state house was to be admitted on its application, provided it made an initial payment to be determined by the board.

The board was given power to take by purchase or otherwise the waters of the south branch of the Nashua River above the dam of the Lancaster Mills in Clinton, and also the land necessary for the construction of a huge reservoir at that point. The act provided that on or before the first of January, 1898, the commissioners should take over the Chestnut Hill pumping station and all of the Boston water system lying to the west of the Chestnut Hill Reservoir.

The funds for this great undertaking were to come from the proceeds of bonds issued by the commonwealth at the request of

¹ *Finance Commission*, ii, p. 26.

² *Ibid.*, sec. 3.

³ *Acts*, 1895, ch. 488, sec. 1.

the board. They were not to exceed twenty-seven million dollars. Subsequent acts increased this limit; by the first of January, 1909, the debt had reached \$40,898,000. The expenditures amounted at that time to \$40,684,637. The bonds, running for forty years, bore interest at the rate of 3 and $\frac{3}{4}$ per cent, the latter selling at a premium. On January 1, 1909 the sinking fund established by the act amounted to \$6,419,283.¹

The first great work, the construction of the Wachusett aqueduct which conveyed the water twelve miles in tunnels, covered masonry and open channel to the Boston water system was completed, and the water introduced in March, 1898.² The Wachusett dam across the Nashua River was regarded as complete in 1906, although the storage of water was begun as early as 1903. The work of stripping the soil and other material from 6.44 square miles and the removal of 6,926,000 cubic yards of material was finished in 1905, and the reservoir was for the first time filled to its high-water mark on May 10, 1907.³ The work also involved the relocation of 8.87 miles of railroad and the purchase and taking of 12.41 square miles of land. Situated on this land were 6 mills, 4 churches, 8 schoolhouses, 492 residences and other buildings and 2 cemeteries.⁴ Great as was the cost of this stupendous work, it was to result in economy for the towns and cities of the crowded metropolitan area.

The method of apportioning the costs was laid down in the act. Each year the state treasurer was to estimate the amount needed to pay the interest and sinking fund requirements and the cost of maintenance, and was to apportion the share of Boston on the basis of valuation. In the case of the other towns and cities, however, one-third was to be on the basis of valuation and two-thirds in accordance with population. The first apportionment in 1898 was to be only \$300,000, beside the amount expended by the state board of health in connection with the project. Then the assessment was to increase \$200,000 annually until it reached the required amount. By 1901 it was apparent that this limita-

¹ *Mass. Public Documents*, no. 57 (1908), p. 33.

² *Ibid.* (1909), p. 12.

³ *Ibid.*, p. 13.

⁴ *Ibid.*, p. 14.

tion upon the assessment would result in a large deficit.¹ Chapter 489 of 1901 was, accordingly, passed, making the assessment for that and every succeeding year cover all the costs.

It was felt by Boston that the apportionment of her share on the basis of valuation was unfair. In 1902 it was estimated by engineers that, whereas Boston paid 83 per cent of the charges, she consumed only 70 per cent of the water.² In 1904 the basis of assessment for the other towns and cities was made valuation for one-third of the assessment, consumption for two-thirds.³ The exception in the case of Boston was removed by chapter 457 of 1906.

The following table gives the total assessments levied in each year, the share of Boston and her percentage of the total assessment.⁴

Year	Total	Boston's Share	Per cent
1898	\$335,807	\$285,600	85.05
1899	489,102	411,861	84.21
1900	697,968	578,696	82.91
1901	1,415,209	1,169,105	82.61
1902	1,546,081	1,274,105	82.41
1903	1,868,561	1,510,857	80.86
1904	2,100,800	1,700,274	80.93
1905	2,177,586	1,758,635	80.77
1906	2,262,657	1,822,556	80.55
1907	2,195,406	1,726,588	78.64
1908	2,271,151	1,789,315	78.78

The figures show the great increase made in the assessment for 1901 in compliance with the law removing the former limit. The general decline in the percentage of Boston was due in part to the admission of other towns and cities into the system. The fall from 80.55 per cent in 1906 to 78.64 per cent in 1907 was caused by the removal of the special basis of assessment for Boston. Of the total assessment of \$2,271,151 required in 1908, \$1,433,517 was for interest, \$519,581 for the sinking fund, and \$318,052 for main-

¹ *Mayor's Inaugural* (1901), p. 72.

² *City Documents*, no. 62 (1902), p. 261.

³ *Acts*, 1904, ch. 426.

⁴ The figures for the years 1898 to 1906 were taken from *Mayor's Inaugural* (1907), appendix IV; those for 1907 from *Mass. Public Documents*, no. 57 (1907), p. 38; those for 1908 from *ibid.* (1908), p. 35.

tenance and operation.¹ The city's share, \$1,789,315, was made up as follows: for interest, \$1,129,390; for the sinking fund, \$409,349; and for maintenance and operation, \$250,576.² The cost of maintenance accounted for only one-seventh of the annual charge.

The taking of the Boston water system was one of the largest transactions of its kind ever made in this country. The questions involved were novel.³ In accordance with the act the board on the first day of January, 1898, made the legal taking of the system.⁴ The purchase price was agreed upon by the governor and the mayor on November 1, 1900, on the basis of the cost of construction. The amount was placed at \$12,531,000, in addition to \$1,154,766 already expended by Boston on the uncompleted Sudbury dam and reservoir. Compensation for the Sudbury dam had already been made, and \$5,000,000 had also been paid on account. The state agreed to pay interest on the balance due after November 1, 1900. The final payment was made to the city on October 29, 1901. The total amount paid, including the payment on the Sudbury dam and reservoir, was \$13,923,715.⁵ In his inaugural of 1901 Mayor Hart highly commended the governor for his aid in securing a settlement without litigation. "It is doubtful," the Mayor said, "whether history shows a more equitable settlement of a claim for which no precedent existed."⁶

The disposition made by the city of this large sum was unfair to the water department. Chapter 427 of 1898 had provided that the amount received should be invested, and the income applied to meet any deficiency in the income of the water department. The act required, however, acceptance by the city council. This was not given, the order of acceptance being vetoed by the Mayor. The city did, however, in 1898 place the first instalments in city bonds, using the income towards paying the metro-

¹ *Mass. Public Documents*, no. 57 (1908), p. 35.

² *Auditor's Report* (1908), p. 147.

³ *Mayor's Inaugural* (1897), p. 93.

⁴ *Mass. Public Documents*, no. 57 (1898), p. 19.

⁵ *Ibid.*, no. 57 (1909), p. 16; *City Documents*, no. 62 (1902), p. 259; *Mayor's Inaugural* (1901), p. 8.

⁶ *Mayor's Inaugural* (1901), p. 9.

politan water assessments. An order of November 5, 1900 devoted the \$12,531,000 to the cancellation of the general debt.¹ The sum of \$5,608,356 was used to extinguish the Cochituate water bonds and \$6,922,000 to purchase and cancel loans issued outside the limit for other than water or rapid transit purposes. The balance of \$643 was paid for premiums on bonds purchased.²

The taking of its reservoirs left the city with the distributing system alone. In its management of this, devoted largely to extensions and renewals, the finance commission found good examples of the extravagance of the day-labor system. "In the past ten years," the report states, "not less than \$1,500,000 has been diverted from the revenues of the city waterworks and used to put and keep on the department payrolls men for whom there was no legitimate work."³ Among other changes the commission recommended giving up the practice of borrowing for extensions, and advised basing the metropolitan assessments entirely on consumption.

The waste of water which took place to such an extent in earlier periods continued in this. The period opened, however, with a great improvement in this respect, due to the limited use of meters and the employment of inspectors. With the building of the metropolitan system and the consequent relief from fear of a scarcity the waste once more became great. It was estimated in 1908 by engineers employed by the finance commission that not less than 60 gallons per day per capita were wasted out of a total consumption of about 150 gallons. The metropolitan commissioners pointed out the same year in a letter to the mayor that, unless this waste were stopped, new sources of supply would soon have to be secured at very great cost.⁴

A much-needed reform was instituted by chapter 524 of 1907. This act provided that all cities and towns obtaining their supply from the metropolitan system should after December 31, 1907 provide with meters all water services thereafter installed, and also annually equip 5 per cent of all without meters at that date. Boston had not complied with the law at the close of the period,

¹ *Mayor's Inaugural* (1903), p. 13.

³ *Ibid.*, p. 39.

² *Finance Commission*, ii, p. 31.

⁴ *Ibid.*, p. 40.

being prevented, according to the water commissioner, by lack of funds.¹

County of Suffolk. The expenditures of Suffolk County advanced steadily from \$1,086,026 in 1887 to \$1,505,615 in 1908. In the period 1903 to 1906 they constituted 4.9 per cent of the total expenditures of the city. The per capita figure was \$2.42.

The expenditure for the new court house which began in the last period continued until 1894. The occupation of the building began in 1891. The cost amounted to about \$3,800,000 which was within the limit fixed by the legislature and less than one-half the figure predicted in the public press. The building covered one and one-half acres of land, and had nearly five acres of floor space.² In spite of these accommodations, an unexpected increase in the business of the supreme and superior courts found it crowded by 1894.³ The cause of this increase, a fact noticed in former periods, Mayor Matthews found in the law governing the venue of cases. Whenever possible, attorneys preferred to bring their cases into Suffolk County, where the facilities for transacting business were greater and the verdicts of the juries larger. This would not have resulted in a burden, if the city had been reimbursed by the state, but the receipts arising from the courts paid but a small part of their expenditures.⁴

The finance commission of 1907 called attention to the steady increase in county expenditures. Of the total expenditures of \$1,500,090 in 1907, \$286,782 was spent on account of the penal institutions, \$182,149 for payments on the county debt, and \$7,324 for certain minor items. The remainder, classed as general expenditures, was \$1,023,833. The increase from \$520,009 in 1892 represented an advance of about 97 per cent. Meanwhile the population had increased but 32 per cent and the valuation but 51 per cent. An analysis of the various branches of county expenditure led the commission to conclude that the cost of administration in Suffolk County was grossly excessive.⁵

¹ *Finance Commission*, ii, p. 41.

² *City Documents*, no. 175 (1894), p. 2.

³ *Ibid.*, no. 220 (1894), p. 73.

⁴ *Ibid.*, pp. 33-36.

⁵ *Finance Commission*, i, pp. 389-400.

One cause, according to the commission, was the circumstance, already mentioned, which made Boston bear an undue proportion of the cost of litigation. The adherence to a loose system of estimates and appropriations in county matters, the absence of any effective check on the increase of salaries, and the creation of new places were also held responsible.¹ Finally, the commission called attention to the old agreement by which Boston paid most of the county expenditures of Chelsea, Everett and Winthrop.²

Rapid Transit. In giving its assistance to the solution of the rapid transit problem, Boston adopted the wise policy of keeping in its own hands all subways within the city. By this means it not only secured a profitable investment, but also made sure its control of the transit situation. Beginning with 1895, subway construction demanded a continual, though naturally irregular, expenditure. In the years 1903 to 1906 the expenditures for rapid transit averaged \$1,730,495. This was 5.9 per cent of the total expenditures of the city, a per capita charge of \$2.93. The greatest expenditure came in 1905 when \$2,678,524 was spent.

The question of rapid transit first came into prominence in the early eighties. The congestion which became more and more serious at that time led to all kinds of suggestions for its remedy.³ The two plans which found most favor were the elevated railroad and the subway, and it was for the privilege of constructing these systems that the fight between opposing financial interests soon waxed hot. As early as 1887 the West End Street Railway Company received permission under chapter 413 to construct a subway, but it made no use of the power. In 1889 a contest between this company and the Ames-Shepard interests who were trying to procure a charter for a combined subway and elevated railway resulted in a victory for the former. The West End Company secured its charter for an elevated railway in 1890, but did not take up the task on account of the great cost involved.⁴

¹ *Finance Commission*, i, pp. 397-399.

² *Ibid.*, pp. 431-434.

³ *Mayor's Inaugural* (1885), p. 61; *ibid.* (1886), p. 60.

⁴ *City Documents*, no. 86 (1894), p. 28.

At this point the community, exasperated by the constant and apparently futile struggle of the financial interests, took up the problem in earnest. In his inaugural of 1891 Mayor Matthews recommended the creation of a commission of experts, appointed by the mayor, to investigate the problem.¹ An order on February 28, provided for such a commission. Later in the year the legislature enlarged this body by the addition of members appointed by the governor. Pending the report of the commission to the General Court, the privilege already granted the West End Company was suspended.²

The report of the commission, which came too late in 1892 for action in that year, recommended the adoption of a system, consisting of an elevated structure in the suburbs and a subway through the congested business center. In 1893 the legislature enacted chapters 478 and 481 which were to serve as alternative plans. Chapter 481 provided that the governor should appoint a commission, known as the metropolitan transit commission, which should take by purchase or otherwise a strip of land extending through the center of the city from Causeway Street to Franklin Park. The land was to be used for a highway, for subways, and for elevated railroads, as the commission should determine. Then the commission might authorize the West End Street Railway Company to build a subway for street railway tracks on such terms as the commission might determine. Bids for the right to construct and operate an elevated railroad for a term not exceeding fifty years were to be invited. At the end of this time the railroad was to become the property of the city. If the commission should not accept any bid, it might upon the authorization of the city council itself construct the railroad and turn it over to the city to operate. This act which required acceptance by the voters of Boston was rejected November 7, 1893 by a small majority.³

The rejection of chapter 481 led the city government of 1893 to adopt the alternative measure, chapter 478.⁴ This act provided

¹ *Mayor's Inaugural* (1891), p. 14.

² *Acts*, 1891, ch. 365.

³ *City Documents*, no. 51 (1908), p. 306.

⁴ *Mayor's Inaugural* (1894), p. 12.

for the appointment by the mayor of three commissioners, to be known as the board of subway commissioners. The board was authorized to lay out and construct a subway for street railway purposes, extending from a point near the junction of Tremont and Pleasant Streets to Scollay Square. It might then compel the cars of any lines to run through the subway. Bonds not exceeding \$2,000,000, to be reckoned outside the debt limit, might be issued.

It was not felt, however, that more than a beginning had been made with the rapid transit problem. The act of 1893 made provision for but a small part of the requirements of the city. In his inaugural of 1894 Governor Greenhalge pointed out how much time and labor had been given by preceding legislatures to the subject. "Should the Legislature of 1894," he said, "succeed in solving this great problem by practical legislation it will have earned for itself an enviable record in this good Commonwealth, where so much has been accomplished for the comfort and convenience of its citizens."¹ The legislature of 1894 did succeed in solving the problem by enacting in chapter 548 a very comprehensive plan for rapid transit in Boston.

This act incorporated the Boston Elevated Railway Company with power to construct an elevated system in Boston and vicinity, subject to the approval, as to locations and plans, of the mayor and aldermen in cities and the selectmen in towns. It might also "lease, purchase, own and operate any lines of street or elevated railway which may be or become tributary to its lines," but no lease or purchase was to be made without the approval of the railroad commissioners.² Under the authority of this and other acts the great consolidated system of the Boston Elevated Railway Company was built up.

The same act also provided for the construction of the subway system. The governor was to appoint "two discreet persons" who with the three commissioners already appointed by the mayor of Boston were to constitute the Boston transit commission.³ The act gave the commission power to construct the

¹ *Senate Documents*, no. 1 (1894), p. 44.

³ *Ibid.*, sec. 23.

² *Acts*, 1894, ch. 548, sec. 17.

Tremont Street Subway with its branches, the East Boston Tunnel, and also the much-needed Charlestown Bridge, "having regard to its use for railway purposes."¹ Upon the order of the commission, the car tracks were to be removed from Tremont Street between Boylston Street and Scollay Square, and from Boylston Street between Tremont Street and Park Square. Compensation for use of the subway was to be determined by the commission, subject to the approval of the board of railroad commissioners.

To meet the cost of construction, the city treasurer from time to time on the request of the commission was to issue bonds to an amount not exceeding seven millions of dollars, and such further amount in addition to \$750,000 already appropriated for the Charlestown Bridge as would be necessary for its completion. These bonds, including the \$750,000 loan, were to be designated on their face "Rapid Transit Loan," and were to run for a term of forty years at rates of interest not exceeding 4 per cent. All but the \$750,000 was to be considered outside the debt limit. The acceptance of the voters was necessary for the enactment of this important measure. It was given by a small majority at a special election held July 24, 1894, the vote being 15,542 in favor and 14,162 opposed.²

The completed subway, extending from the junction of Shawmut Avenue and Tremont Street to the North Station, was opened for full use on September 3, 1898. In his inaugural address the following January, Mayor Quincy was able to say that "the subway has fully answered the expectations of its advocates, and has at least assisted very materially in the solution of the problem of rapid transit for passengers through the central part of the city."³ The cost of the subway, including the alterations made necessary for adapting it to the use of the elevated trains under authority of chapter 500 of 1897, was not excessive. It amounted to approximately \$4,367,500.

The next addition to the subway system was the East Boston Tunnel. It was provided in chapter 500 of 1897 that, as soon as

¹ *Acts*, 1894, ch. 548, sec. 30.

³ *Mayor's Inaugural* (1899), p. 81.

² *City Documents*, no. 51 (1908), p. 306.

the Boston Elevated Railway Company was authorized to begin the construction of its railroad, the transit commission was to construct the tunnel to East Boston. Upon its completion the tunnel was to be leased to the company. The Boston Elevated Railway Company was authorized to begin construction in the summer of 1898,¹ but a question as to the interpretation of the act and a trial of its constitutionality delayed the work on the East Boston Tunnel for two years.² The tunnel was finally completed and opened to traffic December 30, 1904. The approximate cost was \$3,200,000.³

The last great subway, built during this period, was the Washington Street Tunnel constructed under authority of chapter 534 of 1902 and its amendments. The act was adopted by the voters on December 9, 1902, 42,234 votes being cast in its favor and only 16,199 against it.⁴ The acceptance of the act by such a large majority would seem to indicate a growing approval of this method of dealing with the transit problem. In accordance with the terms of the act, the tunnel when practically completed in 1908 was leased to the Boston Elevated Railway Company for the use of its elevated trains. The cost up to January 31, 1909 was about \$7,670,000.⁵

At the close of the period the transit commission, under authority of chapter 520 of 1906, was preparing to begin work on the Cambridge Subway. In accordance with the policy of Boston of owning all subways within her limits, that part of the subway lying within the city was to be constructed by the transit commission and rented to the Boston Elevated Railway Company. The Cambridge end was to be constructed by the company itself.

The effective work done by the transit commission caused the legislature to continue its life throughout the period. At the close of the period its existence seemed assured for some years to come by the inevitable demand of the city for still more adequate transit facilities.

¹ *Mayor's Inaugural* (1899), p. 83.

² *Ibid.* (1900), p. 107.

³ *Auditor's Report* (1907), p. 276.

⁴ *City Documents*, no. 51 (1908), p. 307.

⁵ *Auditor's Report* (1908), p. 278.

RECEIPTS

Taxes. In the years 1903 to 1906 taxes made up 74.6 per cent of the total receipts exclusive of loans, compared with 74.8 per cent for the years 1883 to 1886. In looking down the column which gives the total amount raised by taxation, one is struck by the change in the character of the movement after 1885. Abrupt increases or decreases now give way to a regularity of movement which slowly but just as surely brings the figures to a higher level. The explanation of this regularity is not found in the adherence of the city government to any far-reaching plan, but in the automatic working of chapter 178 of 1885 and its amendments which imposed a limit on the tax rate of Boston. The law of 1885 provided that the rate might not exceed nine dollars on every one thousand dollars of the average valuation for the preceding five years. The state tax and the sums required by law on account of the city debt were not included in this limit.

With the door to excessive borrowing already closed by statute, it would seem that the imposition of a tax limit had at last securely blocked the further encroachment of municipal demands. But the forces which had transformed Boston from a town without even public sewers or public bridges into a city with waterworks, parkways, hospital, and library were not to be so easily stopped. The demands of the common people for playgrounds, public baths and technical schools could not be set aside. And so, now at this point and now at that, the barriers imposed by the legislature gave way.

The law of 1885 included the sums necessary for county expenditures in the \$9.00 limit. Other cities were given a \$12.00 limit and the right to raise money for county demands besides. By chapter 281 of 1887 Boston was allowed to raise a sum not exceeding \$425,000 a year for county expenditures. This limitation was probably due to a fear on the part of the legislature that Boston might take advantage of her control over county affairs to transfer to city departments money raised ostensibly for county purposes.¹ In 1900 the limit upon the city's tax rate was raised

¹ *City Documents*, no. 220 (1894), p. 34.

by chapter 399 to \$10.50. This act also extended the limit by removing the prohibition upon the amount raised for county purposes, and by substituting an average valuation of the preceding three years for the preceding five. By chapter 589 of 1908 the limit was raised to \$10.55, the additional five cents to be used for the school pension fund.

From 1887 to 1896 the amount raised by taxation increased but slowly, being \$10,907,495 in the former year and \$13,411,834 in the latter. But from 1897 on the increase was faster. In 1900, the first year under the \$10.50 law, taxes brought in \$17,755,911, compared with \$15,622,178 in the previous year. By 1908 the tax receipts amounted to \$23,669,259. Of this amount, the general property tax contributed \$21,781,063, the poll tax, \$119,420, the national bank tax retained by the city, \$183,606, the national bank tax from the commonwealth, \$103,491, the corporation tax, \$1,051,779, the street railway tax, \$349,770, and the street railway excise taxes, \$75,122.

In the table on the next page, taken from the reports of the auditor, will be found the total possible appropriations for city and county purposes from receipts other than loans and also the appropriations actually made in each year from these sources since the law of 1885 went into effect. The figures are in thousands of dollars.

Boston raised by taxation almost as much as the law permitted. From 1887 to 1899 all that could possibly be gotten from the taxpayer was demanded. In 1900, the year the limit was raised to \$10.50, full advantage of the privilege was not taken. By 1901, however, the limit was again practically reached. During the remainder of the period the actual appropriations were from 1 to 4 per cent below the possible appropriations, due largely to the fact that the school committee did not avail itself of its full privilege.

Inasmuch as the actual rate of taxation followed so closely the possible rate, an increase in tax receipts could come only through an advance in the valuation of taxable property. The figures for the total valuation, both real and personal, rose gradually throughout the period, being \$747,642,000 in 1887, \$1,012,582,-

Year	Total Possible Appropriations	Actual Appropriations
1885	\$10,925	\$10,608
1886	10,795	10,553
1887	11,654	11,654
1888	11,450	11,450
1889	11,725	11,725
1890	12,489	12,489
1891	12,799	12,799
1892	13,600	13,600
1893	13,465	13,465
1894	13,391	13,391
1895	14,013	14,013
1896	14,544	14,544
1897	15,329	15,329
1898	16,742	16,742
1899	16,885	16,885
1900	20,337	19,521
1901	20,052	19,928
1902	19,781	19,425
1903	20,593	20,197
1904	20,946	20,475
1905	21,430	20,947
1906	22,273	21,391
1907	23,214	22,373
1908	23,508	22,408

000 in 1897 and \$1,327,662,000 in 1908. The smallest increase came in 1894, a year of business depression. The per capita valuation increased from \$1,756 in 1885 to \$2,115 in 1905.

The escape of personal property became even more marked in this period. In spite of an absolute increase in the valuation of personal estate from \$200,471,000 in 1887 to \$245,257,000 in 1908, a period in which the valuation of real estate rose from \$547,171,000 to \$1,082,405,000, the percentage of the burden borne by personalty declined from 26 to 18.

The tax rate increased from \$13.40 in 1887 to \$16.50 in 1908. The causes of this increase are disclosed by a study of the table on the following page which gives the rates of the state, county and city taxes.

The tax rate of \$13.40 with which the period started was not exceeded until 1898. The average rate for the years 1887 to 1899 was \$13.03. With the increase of \$1.50 allowed in 1900, came a jump to a higher level, the rate rising from \$13.10 in 1899 to

TAX RATE PER \$1,000

Year	State	County	City	Total
1887	\$1.00	\$0.57	\$11.83	\$13.40
1888	.97	.74	11.69	13.40
1889	.83	.80	11.27	12.90
1890	.69	.85	11.76	13.30
1891	.53	.57	11.50	12.60
1892	.63	.77	11.50	12.90
1893	.92	.75	11.13	12.80
1894	.75	.81	11.24	12.80
1895	.55	.85	11.40	12.80
1896	.58	.84	11.48	12.90
1897	.73	1.00	11.27	13.00
1898	.54	1.06	12.00	13.60
1899	.55	.95	11.60	13.10
1900	.61	.95	13.14	14.70
1901	.70	.90	13.30	14.90
1902	1.07	.89	12.84	14.80
1903	1.21	.86	12.73	14.80
1904	1.27	.90	13.03	15.20
1905	1.37	.93	13.20	16.00
1906	1.79	.91	13.20	15.90
1907	1.80	.90	13.20	15.90
1908	2.22	.94	13.34	16.50

\$14.70 in 1900. From that point it increased to \$16.50 in 1908, \$3.40 above the rate for 1899. The causes of this increase after 1899 are found in the advance in the city rate from \$11.60 to \$13.34, and also in the growth of the apportionment made by the state. This apportionment included not only the state tax proper but also certain assessments, principally the metropolitan sewerage and park. The metropolitan acts required that the sewerage and park assessments should be levied as part of the state tax.¹ Boston was to pay the water assessment, however, from the income of the waterworks.² If we eliminate these assessments, the rate for the state tax proper would be about \$1.50 in 1908. As these assessments were not large in 1899, it is apparent that from 1899 to 1908 the total tax rate of the city was raised about \$1.00 on account of the growth of the state tax proper and about \$0.70 by the increase of the assessments. The

¹ *Acts*, 1889, ch. 439, sec. 15; *ibid.*, 1893, ch. 407, sec. 12.

² *Ibid.*, 1898, ch. 427.

percentage of the total tax receipts demanded by the state tax proper, the figures for which are given in the tables of expenditures in the appendix, rose from 4 per cent in 1899 to 8 per cent in 1908. The city's quota of the total state tax declined slightly, being 37 per cent in 1887 and 35.9 per cent in 1908.

Another way in which the tax burden grew in spite of the limit imposed by law is found in the provision placing debt requirements outside the limit. If borrowing were allowed, then the burden would eventually fall upon the taxpayer as interest and principal came due.

As in former periods the general property tax was the chief support of the tax system and real estate more than ever bore the brunt of the general property tax. The proportion of the total tax receipts contributed by the general property tax was practically 90 per cent in the years 1887, 1897 and 1908. In 1907 real property made up 82 per cent of the general property valuation and land, as distinguished from buildings, bore 60 per cent of the tax on real estate, compared with 58 per cent in 1887.¹ Land in 1907 bore practically 50 per cent of the city's total property tax levy.

The poll tax brought in less than 1 per cent of the total tax receipts. Unlike assessments on property, the percentage of poll taxes collected was very small. Before 1892 about 50 per cent of those assessed were collected.² In 1891 an amendment to the constitution repealed the provision making the payment of a poll tax a prerequisite to voting.³ As a result, the percentage collected fell to 27.1 in 1896, 24.4 in 1897 and 21.9 in 1900.⁴ Toward the end of the period a determined attempt was made to collect a larger proportion. The percentage rose from 26.3 in 1905 to 48.5 in 1906.⁵ As a financial venture this attempt was not a success, the added cost of collection about equalling the additional return. The cost of collecting the poll tax, normally very high, is a strong argument against it. In 1900 the cost

¹ *City Documents*, no. 3 (1908).

² *Finance Commission*, I, p. 55.

³ *Report of State Tax Commission* (1897), p. 5.

⁴ *City Documents*, no. 83 (1901), p. 4.

⁵ *Finance Commission*, I, p. 55.

equalled 43 per cent of the amount actually received.¹ Inequitable, since the tax bears upon all males alike, irrespective of their ability to pay, costly to collect, and productive of little revenue, the poll tax should be abolished. The argument for its retention, that voters are more responsible if they consciously share the burdens of government, would be stronger if the tax did actually reach them in more cases. The poll tax assessment for 1908 amounted to \$375,132; the collections made in the same year were \$119,420.

The tax on national bank shares held by citizens of Boston was collected in the same manner as in the preceding period. In 1887 Boston retained \$198,337 and paid over to the state \$636,634. The collections declined somewhat during the middle of the period, but rose again toward the end. In 1908 Boston retained \$183,606, turning over \$548,686. The amount received by the city on account of shares held by her citizens in national banks in other cities and towns in the state was small. The last part of the period it was normally about \$20,000.

By far the most productive tax outside of the general property tax was the general corporation tax collected by the state and distributed in part among the towns and cities. The share of Boston grew from \$904,783 in 1887 to \$1,476,671 in 1908.² For purposes of comparison I have included in the figures for 1908 the proceeds of the street railway tax and the so-called excise tax on street railways.

Down to 1898 the city's share in the corporation tax, corresponding to the holdings of her citizens in the capital stock of Massachusetts corporations, remained practically constant, being \$887,310 in that year. In 1898 the first material modification of the law in this period so changed the method of distribution as to give Boston a larger share.³ For some years protests had been made by cities with large street railway plants against the method of distributing the tax on street railways. In his inaugural of

¹ *City Documents*, no. 83 (1901), p. 7.

² The figure for 1887 is made slightly larger by the inclusion of the city's share of the bank tax collected by the state.

³ Bullock, *Finances of Massachusetts*, p. 116.

1892 Mayor Matthews had pointed out that the value of the real estate and machinery of a street railway which might be taxed locally was very small. The very large corporate excess remaining was distributed among the towns on the basis of the stock ownership of their residents, very little going necessarily to the locality where the earnings of the companies were made.¹ Recognizing the purely local character of street railway traffic, the legislature of 1898 enacted chapter 578.² Henceforth the entire receipts from the franchise tax were to be distributed among the towns and cities in which the tracks were located. As a result, the state lost the tax on shares owned by residents outside the state. Boston gained especially, since her trackage was large. She had always lost under the old plan, owing to the fact that so many of her wealthy business men resided beyond her limits. The street railway tax brought Boston \$486,000 in 1899, helping to increase her total receipts from the corporation tax from \$887,000 to \$1,557,000.

Chapter 437 of 1903 made still further changes, enacting the so-called business corporation tax law which applied to manufacturing and mercantile companies only. The act was passed in response to complaints that the old tax was driving capital from the state.³ In ascertaining the corporate excess, deduction was now to be made not only for real estate and machinery, both within and without the state, the practice since 1865, but also for all property taxable in other states. This prevented double taxation on merchandise and other tangible assets employed outside the state. Deduction was also to be permitted in the case of securities which if held by natural persons, residing in Massachusetts, would not be taxed. This change made it practicable to organize a Massachusetts holding company, owning shares in other Massachusetts corporations. A maximum limit was put on the tax assessable on business corporations. The amount assessable must not exceed, after real estate, machinery and non-taxable securities had been deducted, 120 per cent of the

¹ *Mayor's Inaugural* (1892), p. 32.

² Bullock, *Finances of Massachusetts*, p. 117.

³ *Ibid.*

value of the tangible assets and taxable securities owned by the corporation.¹

The immediate effect of these changes was naturally a loss of receipts. The city's share of the corporation tax fell from \$1,051,000 in 1903 to \$945,000 in 1904. But the next year it rose again to the level of 1903, and held that position the rest of the period. The reductions permitted by the business corporation tax law of 1903 stimulated incorporation, many partnerships taking advantage of its more liberal provisions. The total tax receipts from corporations other than street railways rose from \$4,207,000 in 1904 to \$5,064,000 in 1908. On November 5, 1908, when the proceeds for 1908 were distributed, the state had collected \$5,014,000. Of this amount, \$1,365,000, representing the tax on shares held outside Massachusetts, was retained by the state; the balance, \$3,649,000, was given to the towns and cities. Boston received \$1,051,000 representing 20 per cent of the total collections and 28 per cent of the amount distributed. The rate assessed upon the corporate excess fell from \$15.06 in 1887 to \$14.50 in 1891, and then rose to \$17.20 in 1908. Of the \$928,000 street railway taxes collected in 1908, Boston received \$349,000 or 37 per cent.²

But while Boston was gaining somewhat with the growth in the corporation tax receipts she was from the same cause probably losing more than she gained. This curious result arose from the fact that, as long as a business was unincorporated, Boston might assess under the general property tax its real estate, machinery, merchandise, and other property. But as soon as it incorporated, Boston could only tax its real estate and machinery. In the case of many mercantile houses the item of merchandise was very important and the incorporation of such businesses deprived Boston of much personalty formerly taxable. Mayor Fitzgerald estimated in 1906 that the loss from this source, going on during the preceding fifteen years, amounted to at least \$15,000,000 of

¹ In the report of the tax commissioner for 1905, pp. 21-27, will be found concrete examples showing how the corporate excess and the maximum limits were determined.

² *Mass. Public Documents*, no. 16 (1908).

taxable personal property. He estimated the annual loss to the treasury on this account at about \$240,000 a year.¹

In 1908 the legislature recognized the right of the locality where a business was carried on to a greater share in the tax on its corporate franchise. By chapter 614 the distribution of the amount going to the towns and cities was so changed that, instead of all going to the localities where the stockholders resided, but one-half was to be thus distributed, the other half going to the localities where the corporations carried on business. As the act did not take effect until 1909, the effect upon the share of Boston is not seen in this period. The sum turned over to the city in 1909 amounted to \$1,361,000, an increase of \$310,000.

Beginning with 1899, the city received a small amount from excise taxes on street railways. This advanced from \$53,000 in that year to \$75,000 in 1908. Almost all of these receipts arose from the operation of section 10, chapter 500 of 1897. This section provided that in addition to the regular corporation tax imposed on street railways the Boston Elevated Railway Company should annually, as compensation for privileges granted and for the use of the public streets, pay to the commonwealth a sum equal to seven-eighths of 1 per cent of the gross earnings of the company. In case the dividend should exceed 6 per cent, it was to pay in addition a sum equal to the excess of the dividends over 6 per cent. The return from this excise was to be distributed among the different cities and towns in proportion to the mileage located therein. The share of Boston for 1899 was \$51,000. In 1908 the city received \$71,000 out of a total of \$120,000 paid by the company.² Other street railways in Boston contributed directly to the city an excise tax under the provisions of chapter 578 of 1898, a general act relating to street railways. The amount thus contributed was only \$3,270 in 1908. Of this sum, the Boston and Northern paid \$712; the Old Colony, \$165; and the Union Freight Railway, \$2,392.

No important change took place in the assessors' department during the period. The charter of 1909 gave the mayor the

¹ *Mayor's Inaugural* (1906), pp. 8, 9.

² *Mass. Public Documents*, no. 6 (1908), p. 128.

power of appointing the principal assessors without confirmation, subject only to certification by the civil service commission.

Rents. The receipts derived from the rental of city property steadily decreased in relative importance. From 9 per cent of the total receipts in the years 1828 to 1831, they fell to 6 per cent in the period 1840 to 1843, 1.2 per cent in the years 1868 to 1871, 0.8 per cent in the period 1883 to 1886 and, finally, 0.5 per cent in the period 1903 to 1906. If we should include the subway rentals, placed separately under the head of rapid transit, the importance of this branch would be greatly increased.

The receipts from rentals remained practically constant from 1887 to 1901. In 1902 they rose from \$114,128 to \$131,533, and held this new level throughout the rest of the period. This advance was due to an increase of about 30 per cent made in the rentals of the market houses at the expiration of the old leases.¹ In 1908 the markets contributed \$109,952 of the \$131,556 arising from rentals.

Interest. Interest constituted 0.7 per cent of the total receipts in the years 1903 to 1906. The principal items which made up the \$544,389 received in 1908 were \$284,583 of premium on loans, \$53,810 interest on bank deposits, \$168,088 of interest on overdue taxes and \$5,205 of interest on various assessments.

Licenses. In the years 1903 to 1906 licenses contributed 0.2 per cent of the total receipts. Receipts from this source advanced very gradually from \$47,862 in 1887 to \$57,916 in 1901. After that they increased rapidly to \$112,668 in 1908.

A comparison of the license taxes in force in 1901 and in 1908, and the receipts derived in each case shows that the list was extended but little, whereas the receipts in many cases increased considerably. For example, the receipts from the license on amusements advanced from \$1,050 to \$14,076. A new source of receipts was made possible by chapter 584 of 1907. This act gave the city power to grant licenses for the storage and sale of merchandise in the public streets. The minimum fee for this charge was five dollars, the maximum, one hundred dollars. The city authorities believed that Boston was the first city in the country

¹ *City Documents*, no. 25 (1903), p. 2.

to make use of such a license. The renting of sidewalk space had previously been a source of receipts to the owners of the abutting property. As high as fifteen dollars had been charged stand-keepers by owners or lessees for a Saturday afternoon and evening.¹ Though the operation of the law aroused much resistance, and its effectiveness was limited because of a technical defect which prevented prosecution, the new license in 1908 brought in \$20,131.²

Liquor Licenses. The receipts from liquor licenses were even more important in this period than in the preceding. In the years 1903 to 1906 this branch brought in annually on the average \$1,457,878 or 5.2 per cent of the total receipts. One-quarter of this the city reluctantly gave over to the state.³

In 1888 by chapter 340 of that year the number of licensed places was limited to one for each thousand of population in all towns and cities except Boston where the limit was placed at one for every five hundred people. Compliance with this law meant a reduction in the number of licensed places by one-half.⁴ In spite of the difficulties of the task, the reduction was accomplished, the number being cut down from 1,789 on November 30, 1888, to 779 a year later.⁵

The reduction in the number of licenses and the consequent increase in their value demanded higher fees. Chapter 341, enacted at the same time as 340, made the old maximum fees the new minimum ones. A license of the first class, instead of paying a minimum of \$100 or a maximum of \$1,000, was to pay not less than \$1,000.⁶ The law increased the fees to such an extent that the new receipts were greater than the old. In 1908, of a total of \$739,089 received by the state, \$360,659 came from Boston.⁷

Special Assessments. Though a source of large receipts to many American and foreign cities, the special assessment brought

¹ *City Documents*, no. 44 (1908), pp. 7-9.

² *Ibid.*, no. 39 (1909), p. 8.

³ *Mayor's Inaugural* (1906), p. 24.

⁴ *Ibid.* (1889), p. 10.

⁵ See Reports of Board of Police in *House Documents for 1889 and 1890*.

⁶ The former scale is found in section 11, chapter 100 of the *Public Statutes of Massachusetts*.

⁷ *Mass. Public Documents*, no. 6 (1908), pp. 66-68.

in very little to Boston. Of the two chief obstacles to the enjoyment of an adequate special assessment law, one was the supreme court of the state which declared unconstitutional principles very essential to the plan.¹ The other was the very effective opposition which real estate owners throughout the entire history of the city succeeded in organizing.² Failure to assess adequately the cost of improvements burdened the general taxpayer, and, moreover, led to the policy of putting off much-needed improvements until their cost had been greatly increased. The receipts from special assessments averaged in the years 1903 to 1906 but \$477,156, or 1.7 per cent of the total receipts of the city.

At the beginning of this period the main provisions of the various special assessment laws were as follows. Sewer assessments called for three-quarters of the cost, the principle followed under various laws since 1841. The best of these laws, in the opinion of Mayor Matthews, chapter 232 of 1878, had brought in but 38 per cent of the cost.³ Sidewalk assessments, levied under chapter 303 of 1872, demanded that one-half of the cost should be paid by the abutter.⁴ The collection of these assessments was good. Assessments for the construction of streets might not exceed one-half of the special benefit conferred.⁵ The collections for street assessments were, as we have seen, very poor.

The first change in the assessment provisions was made by chapter 456 of 1889. This act put an end to the old three-quarter's rule applying to sewer construction. The new law followed the recommendation of the superintendent of sewers made in his report for 1887. The superintendent believed that if a uniform charge could be adopted, irrespective of the cost of laying the particular sewer, this certainty of knowing the cost in advance would be of great service to those considering the advisability of petitioning for a sewer. Chapter 456 provided for an assessment on land within one hundred feet of the street in which the sewer was laid, "amounting to the sum obtained by

¹ *City Documents*, no. 83 (1901), p. 9.

² *Ibid.*, no. 220 (1894), p. 91.

³ *Ibid.*, p. 60.

⁴ *Ibid.*, no. 34 (1893), p. 69.

⁵ *Ibid.*, no. 83 (1901), p. 11.

multiplying the number of square feet of land within 100 feet of the street by the number representing one two-hundredth part of the average cost per running foot of all the main and common sewers of the city of Boston built during the five fiscal years preceding."¹ This act which would have returned a fair proportion of the cost was speedily amended by chapter 346 of 1890 which accomplished a reduction of at least one-half in the amount assessable.

The abutter was now to pay one cent for each square foot with the very important provision that, if the cost of the particular sewer was less than the amount returned to the city, the assessment should be reduced proportionately. The real estate interests had overdone the matter. Only 21 per cent of the cost was returned under the provisions of this act. The indignant taxpayers petitioned the legislature of 1892 for a law permitting a higher assessment.²

Meanwhile the legislature had replaced the old betterment law concerning street construction by chapter 323 of 1891. The new law imposed the entire cost upon the abutters, the cost being distributed in accordance with the proportions in which the board of street commissioners should determine that the various parcels of land had been increased in value. The liability did not extend beyond one hundred and twenty-five feet of the highway. To provide working funds, the city might borrow three million dollars in excess of the sinking funds established for the payment of this debt. Assessments were to be paid into the sinking fund.

Chapters 402 and 418 of 1892 extended the provisions of chapter 323 of 1891 to sewer construction. The assessment was placed at four dollars a running foot. Though it was expected the assessment would cover about 75 per cent of the cost, up to February 1, 1894 only 59.9 per cent had been assessed.³

Such was the sewer assessment law, modified to some extent by amendments, until the enactment of chapter 426 of 1897. This act provided in a comprehensive way for much-needed improvements in the sewerage system, allowing the city to borrow to the

¹ *City Documents*, no. 34 (1892), p. 134.

² *Ibid.*, no. 220 (1894), p. 60.

³ *Ibid.*

extent of one million dollars a year. As in chapter 323, the legislature proceeded on the assumption that the money was to be returned by assessments. It was provided that the board of street commissioners of Boston should annually determine "just and equitable sewerage charges to be paid by estates in said city for the construction, maintenance and operation of the sewerage works, taking into consideration in determining the charges the necessity of the works as caused by each estate, the amount of use thereof, if any, by the estate or its occupants, the benefit received therefrom by the estate," as well as other things.¹ Chapter 426 introduced a new principle into sewer assessments in the charge for maintenance and operation.

The street commissioners adopted a scheme of assessment, and applied it to estates generally throughout the city. They imposed a charge of three and one-half cents for every hundred dollars of land valuation, buildings excluded. Two cents of this amount was for general maintenance. The assessment was bitterly opposed, and when carried to the supreme court was declared in May, 1899, unconstitutional on the ground that the act did not contemplate an assessment levied in accordance with special and peculiar benefits.² The city was forced to return almost a half-million dollars.³

Failing in her plan to relieve the general taxpayer of the cost of the sewerage system, Boston straightway secured chapter 450 of 1899. This act gave the board of street commissioners power to assess estates, especially benefited by a new sewer or drain, a proportional part of the cost, not exceeding in amount the sum of four dollars per running foot. This law, but little modified, remained in force during the rest of the period.

Chapter 323 of 1891 provided that in the case of sidewalks built in connection with new streets their cost should be part of the general assessable cost. The provisions did not apply to sidewalks built on old streets until the passage of chapter 401 of 1892. Straightway, the real estate interests began to shift the burden back upon the general taxpayer. Chapter 437 of 1893

¹ *Acts*, 1897, ch. 426, sec. 7.

² *City Documents*, no. 38 (1899), pp. 176-180.

³ *Ibid.*, p. 12.

effectively checked sidewalk construction by failing to provide the necessary funds. Moreover, the assessment could not exceed one-half the cost, and in case of an assessment for an earlier sidewalk the amount of the old assessment must be deducted from the new. By chapter 82 of 1894 the city repaid 45 per cent of the assessments made under the law of 1892. The act of 1893, somewhat modified by chapter 393 of 1906, remained in force throughout the rest of the period. Though legally one-half the cost might be assessed, in practice a much smaller part generally fell upon the abutter.¹

The history of street assessments after 1891 is one of amendments modifying the bold provisions of chapter 323, often passed in fear of adverse court decisions, of low assessments, of delayed assessments, of assessments held up by suits at law, often to be scaled down in the end, and, finally, of the never-tiring opposition of the real estate speculator who for generations profited by the generosity of the city. Though much modified, the old principle of charging the entire cost of the improvement was not given up in theory until 1899. Chapter 433 of that year provided that the assessment should not exceed the special benefit. The change was timely. In April, 1901, the supreme court decided, in a case involving an assessment levied under the provisions of chapter 323, that the assessment of the whole cost of construction was unconstitutional, for the reason that this whole cost "plainly may be greater than the benefit to the adjoining estates."² Before the change was made, the city was constructing several streets under special acts which permitted an assessment covering only the special benefit. One of these improvements was the extension of Boylston Street, under the provisions of chapter 339 of 1893.

In 1902 chapter 323 was still further modified. By chapter 521 of that year the assessment could not exceed the special benefit, nor could it in any event exceed one-half the assessable cost. This assessable cost included the cost of sewers up to four dollars a running foot. The principal items excluded were the

¹ *Finance Commission*, iv, pp. 242-244.

² *City Documents*, no. 83 (1901), pp. 15, 16.

THE ASSESSABLE COST OF STREETS BUILT UNDER THE HIGHWAY ACTS
AND THE PERCENTAGES ASSESSED, COLLECTED, ABATED AND OUTSTANDING.¹

Year Committed	Assessable Costs	Assessed	PERCENTAGES OF THE COST		
			Collected	Abated	Outstanding
1893-94	\$17,701.79	93.6%	93.1%	0.5%	...
1894	44,374.24	75.1	71.9	3.2	...
1895	57,625.74	92.4	73.2	12.1	7.1%
1896	17,572.35	100.	98.3	1.1	0.6
1897	47,741.84	100.	89.9	9.6	0.5
1898	663,594.05	64.5	53.5	10.2	0.8
1899	35,740.98	98.3	56.4	38.2	3.7
1900	458,378.29	55.7	39.1	14.4	2.2
1901	61,269.90	78.8	45.2	26.4	7.2
1902	620,857.76	40.1	24.7	6.6	8.8
1903	1,584,715.85	32.7	15.0	13.9	3.8
1904	341,934.99	39.7	15.7	16.5	7.5
1905	494,098.25	33.1	16.0	8.8	8.3
1906	175,838.36	39.3	11.0	11.1	17.2
1907	2,164,765.54	21.7	2.6	4.5	14.6
1908	951,199.34	12.2	3.6	0.2	8.4
1909	67,256.62	48.2	7.7	0.0	40.5
Totals,	\$7,804,665.89	34.5%	17.6%	8.4%	8.5%

cost of surface drainage and the cost of water and gas pipes. Administrative costs, though often considerable, were also excluded. This law, it will be noticed, by limiting the assessment to one-half this assessable cost reduced the maximum assessment for sewers built in connection with street improvements from four dollars a foot to two dollars. When chapter 393 of 1906 repealed chapter 323 of 1891 and its amendments, it retained the assessment provision introduced in 1902. Liberal as this law was, it was even more liberally enforced. One provision especially, appearing in all the laws from chapter 323 to the end of the period, much reduced the receipts from these assessments. No property more than one hundred and twenty-five feet back from the street could be assessed. Yet in many cases more distant property clearly received a special benefit.²

The table above, prepared in 1912 under the direction of the finance commission, shows the working of chapter 323 of 1891 and

¹ Report to Boston Finance Commission upon results obtained from the assessments of highway costs by the street commissioners, by Richardson and Hale, Consulting Engineers, May 17, 1912 (unpublished). Plate VI.

² *Finance Commission*, iii, p. 1173.

its successors. It will be noticed that the law gave great promise during the first few years of its existence. In 1897, for example, the entire assessable cost, which was at that time not far below the real cost, was assessed, and all but 10.1 per cent eventually collected. But after 1897 the fear of adverse decisions or changes in the law itself caused a great decline in its productiveness.

In 1898, 1899, and 1900 Boston for the only time in the history of the city employed the special assessment in street watering. Under the provisions of chapter 419 of 1897 the city watered all its streets, reimbursing itself by an assessment of five cents for every front foot upon all estates within four miles of the city hall. In 1899 the rate of assessment was made to vary from section to section in accordance with the amount of service given. The receipts were sufficient to cover almost the entire cost of street watering. They amounted to \$108,972 in 1898, \$177,068 in 1899, and \$191,462 in 1900. With the raising of the tax limit in 1900 the city government, in response to protests from those assessed, decided to place the entire burden upon the general taxpayer.

Of the \$286,000 received from special assessments in 1908, about \$150,000 came from assessments levied in connection with street improvements, \$130,000 from sewer assessments, and \$6,000 from sidewalk assessments.

Health. In the years 1903 to 1906 the receipts from the health service averaged \$39,469, or only 0.1 per cent of the total receipts of the city. Whereas in the preceding period the receipts had reimbursed the city to the extent of 10 per cent of the total expenditure for health, they now contributed but 2 per cent. Soon after 1898 the receipts from the sale of house offal, heretofore the most important item, disappeared, the city giving up the primitive method of disposal in favor of the more sanitary process of reduction. The loss was made up in part by the increasing receipts of the bath department. In 1908, of the \$38,277 derived from the health service, \$15,363 came from the bath department, \$6,612 from the quarantine department, and \$16,233 from the sanitary division of the street department.

Institutions. Receipts from the institutions rose from \$195,136 in 1887 to \$400,526 in 1908. In the years 1903 to 1906 they

contributed 1.4 per cent of the total receipts, and met 22 per cent of the expenditures of this branch.

In the following table will be found the receipts for selected years from each of the more important branches and the total receipts from institutions. After 1887 the receipts from the house of correction at South Boston are placed under the receipts of the County of Suffolk. Likewise the receipts of the house of industry on Deer Island, which became the house of correction in 1896, are thereafter placed under the receipts of the county. Though not included in the total receipts from institutions after these dates, their respective receipts are given in this table for purposes of comparison. The figures are in thousands of dollars.

Year	Correction	Industry	Overseers	Hospital	Insane	Soldiers	Total
1887	18	31	12	35	10	79	195
1889	(25)	39	15	38	15	85	199
1893	(18)	56	11	56	13	144	289
1896	(20)	60	20	47	12	152	300
1897	(15)	(38)	17	170	15	149	359
1900	(58)	(51)	14	92	20	154	310
1903		(62)	16	72	26	142	265
1905		(71)	16	116	117	138	393
1907		(55)	15	120	129	133	403
1908		(58)	20	131	106	133	400

The receipts from the insane hospitals increased suddenly in 1904. The advance was due to the enactment of chapter 451 of 1900, amended by chapter 321 of 1903. Under this act the state assumed the care of all the insane in state institutions. For every patient cared for in her own hospital, Boston was to receive \$3.25 a week after January 1, 1904. Inasmuch as this allowance did not cover all expenditures, Boston felt she had been discriminated against.¹

Water. The receipts of the water department advanced from \$1,644,751 in 1887 to \$2,679,073 in 1908. In the period 1903 to 1906 they contributed 9.1 per cent of the total receipts of the city.

The following table contains the expenditures and receipts of the water department and the amount by which the one exceeded the other. The figures include both ordinary and extraordinary items, and are in thousands of dollars.

¹ *City Documents*, no. 19 (1904), pp. 2, 3; *ibid.*, no. 19 (1905), pp. 5, 6.

Year	Expenditures	Receipts	Excess of Receipts	Excess of Expenditures
1887	\$2,327	\$1,644	....	\$683
1888	2,159	1,719	....	440
1889	2,102	1,698	....	404
1890	2,316	1,771	....	545
1891	1,824	1,046	....	778
1892	2,381	1,853	....	528
1893	2,396	2,153	....	243
1894	2,896	2,146	....	750
1895	3,361	2,872	....	489
1896	2,589	3,017	\$428	...
1897	2,404	2,708	304	...
1898	2,298	7,313	5,015	...
1899	2,451	2,291	....	160
1900	2,455	2,561	106	...
1901	2,589	10,120	7,531	...
1902	2,546	2,408	....	138
1903	2,767	2,668	....	99
1904	2,866	2,445	...	421
1905	2,985	2,459	....	526
1906	2,927	2,551	....	376
1907	2,733	2,626	....	107
1908	2,695	2,679	....	16

It will be seen that in five years the receipts exceeded the expenditures; in seventeen the expenditures were in excess of the receipts. If only the ordinary receipts and expenditures were given, the showing would not be so bad. The very large receipts for 1898 and 1901 were due to payments made by the metropolitan water board for the reservoir system. This relief from building new reservoirs confined the city's extraordinary expenditures after 1897 to those made in her own distributing system. Consequently, with more regular expenditures, it was easier to adopt a system which would make the water department self-supporting. For several reasons, however, this did not happen.

The policy of constantly reducing the rates, so evident in the last period, is also seen in the first part of this. In 1888 large consumers of metered water were favored with lower rates. Rebates on water bills were given in 1889 and 1890. Meanwhile large water loans were being made.¹

With the close of 1890 reductions ceased. The receipts advanced from \$1,771,087 in 1890 to \$2,153,937 in 1893, bringing

¹ *City Documents*, no. 220 (1894), p. 151.

the waterworks, if we leave out extraordinary expenditures, to practically a self-supporting basis. This policy was maintained down to 1898 when the metropolitan water board took over the reservoirs.¹

By this change Boston lost a profitable business with Chelsea, Somerville, and Everett. This was not appreciated for several years, owing to the fact that the metropolitan water board did not assess the full annual cost before 1901. When the complete assessment was finally made, Boston began to doubt whether she had really gained by the change. In 1900 the water board had expressed the opinion that the new system would reduce the cost of water to Boston.²

Another cause which kept down the receipts was the fact that after 1900 the city ceased to charge other departments for water. The receipts from this source were as large as \$241,000 in 1897.³

Finally, the department lost a considerable sum, to which it was entitled, from the disposition made of the money derived from the sale of the reservoirs. Part of this was rightly used to purchase and cancel water bonds, but part, amounting to almost seven millions of dollars, was employed in cancelling debts contracted for other purposes. At 3 per cent interest the annual income thus lost amounts to \$210,000. This added to \$241,000 from the sale of water to other departments, would have enabled the department during the last ten years of the period to have met all expenditures, including the cost of extensions. When these allowances are made, the water department at the end of this period must be considered self-supporting. If they had actually been made, it is very likely that a reduction in water rates would have taken place. In this case poor bookkeeping aided the taxpayer.

Ferries. The receipts from the ferries brought in but 0.5 per cent of the total receipts of the city in the years 1903 to 1906. Ferries contributed less in 1908 than in 1887.

In the following table will be found for each year in this period the total expenditures, the ordinary expenditures, the ordinary

¹ *Finance Commission*, ii, pp. 28, 29.

² *Mayor's Inaugural* (1900), p. 72.

³ *Finance Commission*, ii, p. 49.

receipts, and the deficit in the ordinary receipts. Interest on the capital invested has not been included. The figures are in thousands of dollars.

Year	Total Expenditures	Ordinary Expenditures	Ordinary Receipts	Deficit
1887	\$259	\$207	\$140	\$67
1888	214	214	138	76
1889	199	199	141	58
1890	225	224	146	78
1891	226	158	116	42
1892	233	211	154	57
1893	249	213	152	61
1894	224	212	155	57
1895	221	209	169	40
1896	249	218	167	51
1897	268	219	171	48
1898	348	213	165	48
1899	331	211	172	39
1900	345	236	166	70
1901	293	248	167	81
1902	300	227	173	54
1903	296	254	177	77
1904	264	258	176	82
1905	275	261	108	153
1906	301	265	104	161
1907	294	294	105	189
1908	249	249	104	145

Boston in this period adhered more firmly than ever to the policy of running her ferries for the convenience of the public rather than for fiscal purposes. Ferries perform the same service as bridges; bridges are free; why, then, should not ferries be free? This was the question asked over and over again by the advocates of free ferries. That these advocates accomplished much, is seen from the fact that at the end of this period from one-half to two-thirds of the total ferry expenditures fell upon the taxpayer.

The very first year of the period saw the introduction of a new schedule of tolls which reduced the rate for foot passengers to one cent, and cut the rest of the schedule practically in half.¹ These rates remained in force throughout the period. The sudden decline in receipts from \$176,198 in 1904 to \$108,478 in 1905 was

¹ *City Documents*, no. 220 (1894), p. 157.

due to the opening of the East Boston Tunnel on December 30, 1904. This new route diverted about two-thirds of the foot passengers from the North Ferry, but apparently had no effect upon the less important traffic of the South Ferry. While her tunnel was self-supporting, the city increased her ferry deficit. Here one municipal industry was in direct competition with another.

The auditor has calculated for each year since 1858 when the city paid its first ferry subsidy the total expenditures, including interest on loans, the total receipts, and the deficit on account of the ferries. He places the total deficit at \$4,316,805.¹

Rapid Transit. Municipal ownership of subways developed new receipts which will probably increase in importance for some time to come. Beginning with \$18,159 in 1896, the receipts from rapid transit increased with the payment of the subway rental to \$252,187 in 1904, then, with the opening of the East Boston Tunnel, to \$338,817 in 1905, closing the period at \$445,317. In the years 1903 to 1906 the receipts from this source amounted to 1.1 per cent of the total receipts of the city.

Under the provisions of chapter 548 of 1894, section 35, the transit commission was given power, subject to the approval of the railroad commissioners, to fix by contract the terms of lease of the new subway. The lease was given to the West End Street Railway Company for twenty years from September 1, 1897 at an annual rental of $4\frac{7}{8}$ per cent of the net cost. It was provided that, if the number of cars operated in the subway at a toll of five cents a trip brought in more than the amount fixed by the rental, the excess was also to be paid.² When the subway was altered to provide for the trains of the Boston Elevated Railway Company an additional rental of $4\frac{7}{8}$ per cent on the net cost of the necessary alterations was charged. Of the \$223,000 received as rental for the subway in 1908, about \$400,000 represented $4\frac{7}{8}$ per cent on the original cost of the subway, \$11,800, $4\frac{7}{8}$ per cent on the cost of the alterations, and the remainder, about \$11,500, the extra toll charge.

¹ *Auditor's Report* (1908), p. 226.

² *Boston Transit Commission* (1909), p. 10.

The terms of the lease of the East Boston Tunnel to the Boston Elevated Railway Company were stipulated in chapter 500 of 1897, section 17. The lease was made for twenty-five years from June 10, 1897, the date of the passage of the act, with provision for an annual payment of $\frac{2}{3}$ of 1 per cent of the annual gross earnings of the company. The rental began with the opening of the tunnel to traffic, December 30, 1904.¹ The city was also allowed to collect a toll of one cent from each passenger using the tunnel. In 1908 the receipts from the tunnel amounted to \$162,000, \$51,000 being the rental and \$110,000 the return from the tolls above the cost of collection.

The Washington Street Tunnel was leased under the provisions of chapter 534 of 1902 to the Boston Elevated Railway Company for twenty-five years from November 30, 1908, the date of the opening of the tunnel, at an annual rental of $4\frac{1}{2}$ per cent of the net cost.

The three subways were all leased on terms which would in a generation probably repay the debts incurred, and leave Boston with very valuable income-yielding property. The law required that the receipts be used for interest and sinking fund payments.

The financial success of the East Boston Tunnel, however, was for a time in doubt. This was due to the fact that the larger part of the return to the city came in the form of one cent tolls. Chapter 500 of 1897, section 17, had provided that, if in any year the receipts from the tunnel should exceed the interest and sinking fund requirements, the board of railroad commissioners might on the petition of ten citizens of Boston reduce the toll for the next year. The board might altogether discontinue the toll, if in its opinion the rental was sufficient to meet the debt requirements. In spite of these provisions, the opponents of the ferry toll now turned their attention to the task of abolishing the tunnel toll. In 1906 a bill was introduced into the legislature, providing for the abolition of the toll. The legislature turned to the supreme court for its opinion. The court asserted that to abolish the toll would impair the contracts made with the holders of the tunnel bonds. These were stamped with the following words:

¹ *Auditor's Report* (1908), p. 277.

² *Ibid.* (1908), p. 278.

"East Boston tunnel. The whole amount of the rentals for the use of and tolls for persons passing through the East Boston tunnel is pledged for the payment of the principal and interest of this loan."¹ This opinion, for the time being, saved the taxpayer from assuming the burden of the East Boston Tunnel debt.

Sales of Property. The sale of city property brought in an average return of \$360,188 during the years 1903 to 1906. This amounted to 1.3 per cent of the total receipts of the city. With the beginning of this last period the old city lands, so important an element in the finances of the earlier periods, had practically all disappeared. Sales in this period consisted almost entirely of property no longer desired for public purposes such as school-houses overtaken by the march of the business district.

County of Suffolk. The receipts of Suffolk County advanced from \$157,777 in 1887 to \$281,613 in 1908. This meant an increase in relative importance from 0.7 per cent in the period 1883 to 1886 to 1.1 per cent in the years 1903 to 1906. In the latter period the county receipts amounted to 12.7 per cent of the county expenditures.

DEBT

The net debt advanced from \$26,487,000 on April 30, 1887 to \$72,036,000 on January 31, 1909, an increase of \$45,549,000 or 171 per cent. The per capita debt had risen in the meantime from about \$65 to about \$110. Every thousand dollars of assessable property was burdened with approximately \$55 in 1908, compared with \$35 in 1887. The interest payment on the debt in 1908 added about 17 per cent to the other expenditures of the city, exclusive of the state tax and sinking fund payments.

If we take the first twenty-one years of this period, divide into thirds, and, then, find the increase both absolute and relative in each of these thirds, the results are as follows:

Year	Amount of Debt	Absolute Increase	Relative Increase
1887	\$26,000,000	.....	...
1894	33,000,000	\$7,000,000	26%
1901	51,000,000	18,000,000	54
1908	70,000,000	19,000,000	37

¹ *Senate Documents*, no. 367 (1906).

Though the absolute increase in the last third slightly exceeds that in the second, the percentage of increase is considerably greater in the second third. Before 1894 the increase in the net debt of the city was much less than after that year.

This increase took place in spite of the law limiting the indebtedness of Boston. Chapter 178 of 1885, which placed the nine-dollar limit on her tax rate, also reduced the limit of her indebtedness from 3 per cent on the last preceding valuation to $2\frac{1}{2}$ on the average valuation for the five preceding years. After January 1, 1887 the debt limit was to be only 2 per cent. This called for a reduction in a year and a half of about \$6,500,000.¹ The new period began with Boston trying to bring her debt inside the limit and at the same time attempting to live on a nine-dollar tax rate. Meanwhile many improvements, set aside during the long period of rest just closed, demanded more than ever the attention of the city.

The debt created in 1887 amounted to three millions, and was all contracted for objects of permanent character. About \$600,000, on account of the water department, was exempted by statute from the operation of the debt limit. The remainder, exempted by special acts, was for the county court house, the parks, the Stony Brook improvement and the new bridge to Cambridge. The year closed with a gross debt of \$48,987,000, \$18,485,000 of this being exempted from the operation of the 2 per cent law. The remainder, after the subtraction of sinking funds, amounted to \$14,315,000, but \$433,000 in excess of the prescribed limit. Mayor O'Brien remarked that "we are gradually working out of the embarrassments in consequence of the 2 per cent limit."² The net debt, both within and without the limit, increased this year \$874,000.

Toward the end of 1888 the city found itself within the debt limit. Straightway, it proceeded to borrow on ten-year bonds for a large number of purposes which ought to have been met from ordinary receipts. Such loans could naturally only be contracted within the limit. Boston also borrowed as in 1887 on loans outside the limit for such objects as the county court house, the

¹ *Mayor's Inaugural* (1887), p. 21.

² *Ibid.*, p. 16.

water department and park construction. The increase in the net debt was \$293,000. The year closed with a right to borrow \$331,000 inside the limit.¹ The year 1889 was a repetition of 1888, except that borrowing was on a larger scale, the year showing a net increase of \$3,421,000. The margin for borrowing at the end of the year was \$317,000.

The year 1890 showed a marked improvement over 1889. The amount borrowed for current expenditures was much smaller. The net debt increased but \$267,000, and the margin at the end of the year had risen to \$1,618,000. Still further improvement was shown in 1891. In this year but \$634,000 was borrowed inside the limit, \$500,000 being for schoolhouses, \$50,000 for laying-out highways, and \$84,000 for sewers. The sum of \$916,000 was borrowed outside the limit for public parks and water, making a total of \$1,550,000. The net debt was reduced \$908,000. The power to borrow under chapter 178 of 1885 was increased to \$3,485,000. Under the provisions of a more liberal act, chapter 93 of 1891, which ordered the commissioners of the sinking fund to certify each year before the first of April their estimate of the amount the city could borrow during the entire year, the margin was larger — \$5,204,000. The city might now proceed to borrow in one sum this entire amount, instead of borrowing in smaller amounts, as formerly, while the limit gradually increased.²

Two other acts were passed in 1891 directly affecting the debt of Boston. The public statutes, chapter 29, section 8, had provided that cities and towns might incur debts for water purposes, payable in thirty years, for sewer purposes, in twenty years, and for all other purposes, in ten years. Chapter 321 of 1891 now extended the term of the last class of debts, in the case of Boston, from ten years to twenty years, thereby encouraging borrowing. Previous to this act, however, the legislature had enacted chapter 206 which was intended to put an end to loans for current expenditures. This act forbade Boston to borrow any money within the limit, unless the mayor should write upon the order authorizing the loan that in his opinion the amount intended to be

¹ *Auditor's Report* (1888), p. 9.

² *City Documents*, no. 112 (1891), p. 2.

borrowed was not to meet a current expense or "that such money is to meet a current expense, but that public necessity requires the borrowing of the same."¹ As one would expect, in the absence of any accurate definition of "current expenses," this last act was not consistently followed.²

The year 1892 saw greater borrowing. Much of this was for the laying-out and extension of highways, for sewers and for water, but there was also borrowing for ordinary expenditures. The net debt advanced \$474,000. The year 1893 required still greater borrowing, but no more than in 1892 for objects which should have come from ordinary receipts. The increase in the net debt amounted to \$2,601,000.

The financial storm of 1893 gave the city government much trouble, though not as much as it did other cities. The issues of 3½ per cent bonds, often at a premium during the first few years of the period, had given way entirely to the 4 per cents by 1890. These sold at a good premium in 1890, at par or slightly above in 1891, and, then, once more at a premium in 1892. But in 1893 they were being offered in the open market at less than par. In July the city found itself with only money enough to carry on works, for which loans had been authorized, for two or three months. One million dollars of bonds might have been sold to the sinking fund, always a heavy purchaser, but this course was given up, as involving too great a drain upon the local banks which held the deposits of the commissioners. On July 27, \$1,000,000 of bonds were advertised, the usual method of disposal, but only one bid was received, for \$10,000, and that was rejected. The treasurer then resorted to private sale. This method was successful; toward the end of September it was even possible to make sales by advertisement. Most of the sales were at par, a few at a small premium. Between August 1 and November 4, four millions had been sold, leaving the city with ample funds.³ But for the fear of a worse panic Boston would not have borrowed so heavily in 1893.⁴ On November 20, 1893

¹ *Acts*, 1891, ch. 206, sec. 1.

² *Finance Commission*, i, p. 106.

³ *City Documents*, no. 159 (1893).

⁴ *Mayor's Inaugural* (1894), p. 10.

Mayor Matthews was able to say; "Boston enjoys the enviable reputation of being the only city in this part of the country which was able to sell its securities during the recent panic at the ordinary rate of interest, and which was not obliged to suspend operations in any branch of municipal work; and the city is now in a position, without financial loss, to give much-needed employment during the coming winter."¹

The year 1894 stands at the turning point in the growth of the debt. With that year a period of greater borrowing began which continued with scarcely a pause until 1901. Unable to raise sufficient money by taxation and forced to make needed improvements in such branches as streets, schools and rapid transit, borrowing was the only recourse. The legislature aided the city in its attempts to raise money by loans. Whereas borrowing outside the limit had been the exception, it now became the rule. The right to borrow inside the limit provided for objects which should have been met from the tax receipts; the frequent permission to borrow outside the limit took care of the expenditures for which the city was really justified in going into debt. Many of these expenditures were imposed upon the city without her consent.

Prior to 1894 the loans issued outside the debt limit for other objects than the waterworks amounted to thirteen millions. Those issued after 1893 amounted to fifty-six millions. The finance commission of 1907 advised against further borrowing outside the debt limit except for rapid transit, and asked that the legislature be requested to make the changes necessary to carry out this policy.² In April, 1909, the legislature put on record its determination to make the debt limit a real barrier to municipal borrowing. Chapter 315 revoked all authority granted under any special act to the city of Boston to borrow money outside the debt limit except for transit purposes.

The amount borrowed in 1894 was \$6,655,000, of which \$3,209,000 was within the limit and \$3,445,000 outside. The increase in the net debt was the largest up to that time in the period, being

¹ *City Documents*, no. 159 (1893), p. 5.

² *Finance Commission*, ii, p. 168.

\$3,622,000. It stood at the close of the year at \$37,131,000. In his valedictory address Mayor Matthews said that with the completion of the court house, the library, and the parks, which had required the issue of loans to the amount of fourteen millions since 1885, "there is no reason why we should not again enter upon a period of reduction, if it were not for the contemplated construction of the subway." Apart from the subway loans he believed the debt should be less in 1900 than in 1895.¹ The credit of the city had so far improved that 4 per cent thirty-year loans were sold in November, 1894, at 113.55, returning but 3.28 per cent to the purchaser.²

The net increase in 1895 was \$3,562,000. The total debt created in that year amounted to \$6,793,000; of this \$4,115,000 was outside the limit. The first large loans for rapid transit were made this year, one forty-year loan for \$1,000,000 at 4 per cent, and one 3½ per cent loan for \$250,000, which sold at 100.625.³ Chapter 408 established a precedent in making a direct legislative appropriation continuing for several years within the debt limit. The act gave the school committee authority to make certain large loans in the succeeding years, but they were to be within the debt limit. This method of resorting to the legislature made possible the carrying out of a definite policy over a series of years, a thing which one city council by its own order could not have made certain.⁴

The growth of the city's debt was carefully considered by the finance commission of 1895. It concluded that the limit of indebtedness had practically failed.⁵ It found that almost all the large improvements of the preceding ten years had been provided with money borrowed outside the debt limit. "The amount which could be annually borrowed 'inside the debt limit' has come to be treated simply as an annex to the tax-levy, to be borrowed in full every year and used chiefly for minor improvements, practically, if not admittedly, for current expenses, while the

¹ *City Documents*, no. 220 (1894), p. 52.

² *Ibid.*, p. 53.

³ *Auditor's Report* (1895), p. 198.

⁴ *Mayor's Inaugural* (1898), p. 13.

⁵ *City Documents*, no. 142 (1895), p. 2.

large necessities of the city, which there is no question should be met by borrowing, have been treated as emergencies and the requisite loan obtained outside the debt limit.”¹ The citizens, the commission said, had been blinded by the low rate of interest and the good credit of the city to the fact that sooner or later all debts must be met by taxation. It pointed out that the money used for debt requirements on schoolhouse loans would be nearly enough to take care of the annual charge for new schoolhouses. Borrowing had taken place on a large scale for objects that should have been treated as current expenditures, such as “the repaving and repairing of streets, the providing of new schoolhouses for the annual increase of school population, the repairing of city buildings, sometimes disguised under the title of ‘remodelling,’ the furnishing of schoolhouses and other public buildings, and many other objects too numerous to mention.”²

The commission found the tax limit in part responsible for the failure of the debt limit. It considered the nine-dollar law a comparative failure. “We believe also,” the commission said, “that it has lulled the citizens into a feeling of false security, and prevented that perpetual watchfulness of municipal expenditure which alone can produce good results.”³

The remedy recommended by the commission was an amendment to the constitution which “would remove the futile distinction between debt ‘inside and outside the limit,’ would prevent continual applications to the Legislature for leave to borrow ‘outside the debt limit,’ and would be a limit that was really a limit.”⁴ It believed that for purposes other than water a limit of 2½ per cent would be sufficient. Then, as soon as this amendment should be adopted, it asked that the law limiting the rate of taxation should be repealed.

The commission also condemned the sinking fund system. It found that the system required the keeping of a large amount of cash on deposit in the banks at 2 per cent, while the city was paying 3.3 per cent, that it was cumbersome and intricate, and that it was not necessary for maintaining the city’s credit. The com-

¹ *City Documents*, no. 142 (1895), p. 3.

³ *Ibid.*

² *Ibid.*, p. 6.

⁴ *Ibid.*, no. 142 (1895), p. 18.

mission proposed that the bonds held in the sinking fund should be cancelled and that future loans should be of the serial kind, payable in annual instalments.¹ This same recommendation was made by the finance commission of 1907. Among other criticisms made by the commission of 1907 against the sinking fund system was the charge that the opportunity to get money from the sinking funds for city bonds encouraged extravagance.² This last commission was successful in seeing its recommendation for serial loans incorporated in the charter of 1909. Henceforth all loans issued by the city were to be made payable in annual instalments. No new sinking fund might be established.

The year 1896 brought the net debt of the city to \$45,879,000, an increase of \$5,186,000 for the year. In all \$8,274,000 was borrowed, \$2,919,000 being inside the limit and \$5,355,000 outside. Loans were made more than ever for objects which the finance commission of 1895 had just condemned. The credit of the city was well maintained during the financial disturbance in 1896, its bonds selling at only a slight decrease. Toward the end of the year the city reduced the interest rate upon its twenty-year bonds from 4 to $3\frac{1}{2}$ per cent. A $3\frac{1}{2}$ per cent loan for \$1,500,000 was sold in the latter part of November at 101 $\frac{5}{8}$. Except for the forty-year rapid transit loans, not a single $3\frac{1}{2}$ per cent loan had been issued since early in 1890.³

In his inaugural of 1897 Mayor Quincy complained of the difficulty of getting loan appropriations for general purposes considered by the city council, so great was the pressure for local improvements. He also condemned the practice of borrowing money for twenty years for works which would last but ten years. The Mayor recommended that the city engineer make an estimate of the probable life of every separate piece of construction provided for by loan, and that the term of the loan be limited to his estimate.⁴ In 1896 the practice of issuing loans for less than twenty years was revived, only to be given up soon after. The finance commission of 1907 called attention to this abuse, and

¹ *City Documents*, no. 142 (1895), pp. 19-22.

² *Finance Commission*, ii, pp. 160-165.

³ *Mayor's Inaugural* (1897), pp. 10, 11.

⁴ *Ibid.*, pp. 100-102.

commended the city government of 1906 and 1907 for making its street improvement loan for fifteen years. It recommended that the term of all loans for pavements and street construction be limited to ten years.¹

At the end of 1897 the net debt stood at \$51,482,000, the increase for the year being \$5,603,000. A total of \$8,627,000 had been borrowed, of which \$5,537,000 was outside the limit and \$3,089,000 inside the limit. Three and one-half per cent loans readily found a market, a large part selling as high as 105.889.

In 1898 the increase in the net debt was \$2,740,000, the smallest increase since 1893. In his inaugural of 1898 Mayor Quincy urged that loans for other than income-yielding objects, such as the subway, be inside the limit. He pointed out that this could be accomplished by special acts. Otherwise the borrowing capacity of the city would be utilized for local improvements. Mayor Quincy, however, did not look upon the great increase of expenditure with alarm. If private capital had enough faith in the future of the city to invest its millions in the South Terminal and the Elevated, he believed the city need not fear to do its part.²

The year 1899 saw a return to more extensive borrowing. The net debt advanced to \$58,333,000, an increase of \$4,111,000 in the year. Of a total debt of \$8,748,000 created, \$6,205,000 was outside the limit and \$2,543,000 inside the limit. The 3½ per cents sold as high as 107.697. The net debt at the end of this year meant a per capita burden of approximately \$105, compared with one of \$75 five years earlier, and one of \$65 at the beginning of the period. To find anything comparable with the activity of these five years, we have to go back to the days when Boston was constructing her waterworks or to the period just before the crisis of 1873.

By 1900 it was very plain that something must be done to check this borrowing. On March 19, Mayor Hart made a statement to the legislature in support of a measure which would raise the tax limit to \$12 and the debt limit to 2½ per cent, thus putting Boston on the same plane as other cities. The object of the new law, he

¹ *Finance Commission*, i, pp. 107 and 119.

² *Mayor's Inaugural* (1898), pp. 12-16.

said, was to give Boston enough borrowing capacity to complete the work already begun, and to provide for all requirements as they might arise. The increase in the tax limit would, he believed, check the growth of the debt.¹ The legislature of 1900 granted the city's request for a debt limit of $2\frac{1}{2}$ per cent on the average valuation of the preceding three years, but raised its tax limit to only \$10.50.²

This increase in the tax limit made less necessary the use of the city's credit. Though the debt continued to increase, the advance was not so rapid as it had been before 1900. The debt created in 1900 was only \$3,163,000. Of this, \$2,322,000 was outside the limit and \$841,000 inside the limit. The proceeds of a much higher tax rate allowed the city to pay all maintenance expenditures from ordinary receipts, though not all the annually recurring capital expenditures. The net debt fell from \$58,333,000 to \$51,385,000, a decrease of \$6,948,000. This large decrease was made possible by the use of five million dollars in cancelling Cochituate water bonds. This money was received from the state in 1898 as the first payment on the purchase price of the reservoir system. Even allowing for this, there was a decrease of practically two millions made from ordinary receipts. In 1899, \$350,000 3 per cent bonds were issued, and in 1900, \$1,066,000 more. None of these were sold on the market, all being taken at par by the sinking fund commissioners.

Boston began the year 1901 with the right to borrow \$9,759,000, the product of the new $2\frac{1}{2}$ per cent law. The total debt created this year was almost twice as much as in 1900 — \$5,971,000. With its greater borrowing capacity we are not surprised to find that \$4,018,000 was borrowed by the city inside the limit, and but \$1,953,000 outside. The net debt fell \$4,233,000 to \$47,152,000. But for the addition to the sinking fund of seven and one-half millions, the final payment for the waterworks, the net debt this year would have increased about three millions. The years 1891 and 1900 were the only years in this period, in which a reduction in the debt was made from ordinary receipts. Inasmuch as Boston was responsible for about 80 per cent of the metropolitan

¹ *City Documents*, no. 104 (1900).

² *Acts*, 1900, ch. 399.

water debt, the receipt of \$12,500,000 for the waterworks was to the extent of \$10,000,000 merely a payment from the right hand to the left. All the debt issued in 1901 was taken at par by the sinking fund commissioners or the various trust funds. More than half of it consisted of 3 per cent bonds.

The margin for borrowing in 1902 was \$8,128,000, including loans authorized but not issued. The very large sum of \$9,367,000 was issued, \$5,657,000 of this being inside the limit. Only about one million in 3 per cents were issued; the $3\frac{1}{2}$'s sold at 104.32, compared with 107 and 108 obtained at the last public sales in 1900. This was the last issue of 3 per cents. Boston was rapidly getting back into the practice of borrowing for all little improvements. The net debt this year increased \$6,936,000, the largest advance in the period. In his inaugural of 1903, Mayor Collins said: "The obvious fact cannot be ignored that Boston either plunges or is rushed into deeper debt every year."¹

The year 1903 added \$4,128,000 to the net debt. Of the \$6,617,000 issued, all but \$1,527,000 was outside the limit. This year $3\frac{1}{2}$ per cent loans were issued, \$2,368,000 being taken at par by the city funds and \$3,949,000 being sold to the public at the low price of 100.04.

In 1904 the increase was practically the same — \$4,211,000. The debt created amounted to \$7,189,000, of which \$3,793,000 was contracted outside the limit, principally for separate systems of drainage, sewerage works, the subways and the Charles River improvements. The $3\frac{1}{2}$ per cents sold this year at 100.937.

Little change took place in the borrowing policy in 1905. The right to borrow was now \$5,491,000, but the legislature was almost as liberal in its permission to borrow outside the limit as it had been before the granting of the $2\frac{1}{2}$ per cent limit in 1900. The net increase in 1905 was \$4,106,000. The sum of \$7,447,000 was borrowed, \$4,536,000 of this being outside the limit. Higher interest rates made it necessary for Boston to sell several millions of her $3\frac{1}{2}$ per cents "over the counter," the first time this method had been resorted to since 1893.² They were sold, however, at par, and at 100.217.

¹ *Mayor's Inaugural* (1903), pp. 3, 4.

² *Ibid.* (1906), p. 20.

In his inaugural of 1906 Mayor Fitzgerald expressed his belief that it would be a very desirable thing if the city's bonds could be more widely distributed among its own people. The general distribution of public obligations in Europe, he said, was a factor which makes for financial conservatism and political stability. One great obstacle in the way of this change, according to the Mayor, was the fact that the city bonds were subject to taxation. Large capitalists could evade taxation, whereas small investors might be caught by the assessor. The fear of having to pay $1\frac{1}{2}$ per cent in taxation on a $3\frac{1}{2}$ per cent bond was sufficient to make the purchase unattractive.¹ In 1894 Mayor Matthews had estimated that the exemption of city bonds, which brought in very little in taxes, would save the city from $\frac{1}{4}$ to $\frac{1}{2}$ per cent in the rate of interest paid on future loans.²

The last three years of the period saw an increase in the net debt, but in each year the increase was less than in the preceding. In 1906 the increase was \$2,288,000; in 1907, \$1,960,000; and in 1908, \$1,255,000. The debt created in 1906 amounted to \$5,922,000, of which \$3,497,000 was outside the limit. In that year the city issued \$2,023,000 $3\frac{1}{2}$ per cent bonds, all of which were taken at par by the city funds, and \$3,899,000 4 per cent bonds, all sold to the public at the low price of 101.777.

In 1907 the total debt issued was \$5,249,000, of which \$3,152,000 was outside the limit. The loans were placed to even less advantage than in 1906. Only \$92,250 $3\frac{1}{2}$ per cents were issued; all the 4 per cents sold at par except \$100,000, sold at 101.

The loans of 1908 show the influence of the finance commission. But \$4,498,000 was borrowed, only \$1,738,000 being inside the limit. Of the \$2,760,000 borrowed outside the limit, \$2,000,000 was for subway construction. Except for an issue of \$1,800 at $3\frac{1}{2}$ per cent, the bonds bore 4 per cent. They sold on better terms than the issues of 1907, bringing 106.44.

In addition to the city and county debt Boston was liable for a large share of the metropolitan debts. Every year the city was called upon for a certain proportion of the interest and sinking

¹ *Mayor's Inaugural* (1906), p. 21.

² *City Documents*, No. 220 (1894), p. 29 (note).

fund requirements of these debts. Consequently, in ascertaining the real debt burden in this period, the city's share of these debts should be added to its own direct debt. This has been done in the following table, compiled by the finance commission of 1907, for the quinquennial periods 1885 to 1905 and for the year 1907.¹

NET DEBT AT BEGINNING OF FISCAL YEAR

Year	Net City and County Debt	City's Share of Metropolitan Debt	Total Debt
1885	\$24,753,949	.....	\$24,753,949
1890	30,120,655	\$528,095	30,648,750
1895	37,131,423	2,286,842	39,418,266
1900	58,333,337	21,687,573	80,020,910
1905	62,427,219	38,096,539	100,523,758
1907	68,821,359	37,967,986	106,789,346

At just the time that the debt of Boston began to advance so rapidly, the metropolitan debts commenced to assume importance. The total debt of Boston, including her share of the metropolitan loans, advanced from thirty-nine millions in 1895 to eighty millions in 1900, when the metropolitan debts amounted to over one-third of the city and county debts. The total debt reached one hundred and six millions in 1907. At the end of the period the city's share of the metropolitan debts was more than one-half her own debt. Including her metropolitan debts, the total per capita debt of Boston rose from about \$65 in 1887 to \$80 in 1895, \$140 in 1900 and \$175 in 1908. The per capita figure for the city and county debt was about \$105 in 1900 and \$110 in 1908.

Of this debt of \$106,000,000 in 1907, possibly \$40,000,000 could be looked upon as self-supporting, that incurred for the metropolitan water system and for the subways. The share of Boston in the net metropolitan water debt was twenty-seven or twenty-eight millions. At the close of the period her water system was on practically a self-supporting basis. It was unlikely that any considerable part of the cost of water would be shifted to the taxpayers. The subway debt of about twelve millions would be taken care of by the receipts from the subways.

¹ *Finance Commission*, i, p. 119.

Though not ordinarily a charge upon the taxpayer, a self-supporting debt increases the liability of the city and, consequently, reduces its credit slightly. There is always the possibility that the receipts of the industry may prove insufficient, in which case the taxpayer would be liable. This possibility is not so remote in a city where the mass of the voters have more to gain by a reduction in public service rates than they will lose by the consequent rise in tax rates. Though forty millions of these one hundred and six millions of debt in 1907 might be looked upon as ordinarily taking care of themselves, they should not be regarded as of no consequence.

FINANCIAL POLICY

The period 1887 to 1908 was one of advancing expenditure. The policy of retrenchment, so steadfastly adhered to in the years following the crisis of 1873, was giving way by 1887 to one of activity, which gradually became more marked as the years went by, reaching its maximum force in the year 1897. After 1897 the advance, though continued, was at a more moderate rate.

The movement of expenditures and receipts cannot be explained in this period as easily as in former ones by reference to the avowed policies of various city administrations. In this period the control of the finances of Boston was transferred to a much greater degree from the City Hall to the State House. In many instances, it must be admitted, the legislature simply enacted the city's demands. But when these requests were once enacted, subsequent administrations might find themselves committed to policies they were not in sympathy with. This fact limited considerably the possibilities of retrenchment. On the other hand, this same legislative supervision, exercised over the city's ability to raise money either by taxation or by borrowing, placed a check upon expenditures as excessive as those made in the years preceding the crisis of 1873. In this legislative control we find the cause of the more gradual growth of receipts, expenditures and debt.

In 1887 and 1888 Hugh O'Brien was mayor. Though expenditures including the state tax, increased about \$1,600,000 in 1887,

the Mayor was able to keep within the nine-dollar tax limit, and also, in compliance with the radical demand of the law of 1885, to bring the city's debt practically within the 2 per cent limit. All loans made this year were for objects of a permanent character, and were exempted by statute or by special act from the operation of the debt limit. The net debt increased but \$874,000. The advance in expenditures was due largely to an increase of about \$740,000 in the expenditure for parks and of about \$280,000 in the state tax.

Expenditures were \$16,894,657 in 1888, only slightly higher than in the former year. Toward the end of the year the city found itself with the right to borrow. The temptation was too great, and Boston adopted once more her favorite policy of borrowing for current expenditures. The net debt advanced in 1888 only \$293,000.

Borrowing for current expenditures, indulged in to a small extent in 1888, was practised to a greater degree in 1889, during the first term of Mayor Thomas N. Hart. The increase in the net debt was \$3,421,000.

In 1890, during Mayor Hart's second term, a marked improvement in the borrowing policy of the city was shown; the net debt increased but \$267,000. Expenditures were about \$530,000 greater than in 1889. A large part of this advance was due to greater expenditure for the improvement of the park system, an expenditure of great importance during the next few years. In this year expenditures for the new library, which was being built and equipped from 1888 to 1895, reached their highest point.

From 1891 to 1894 Nathan Matthews, Jr. was mayor. His keen analysis of the city's needs, so fortunately preserved in his valedictory address, made his administration especially effective. He secured the enactment of chapter 323 of 1891, which, if it had not been held unconstitutional, would have opened to Boston large additional receipts from special assessments. Expenditures during the four years 1891 to 1894 increased at a faster rate than in the four preceding. The year 1891 saw still further improvement in the policy of refusing to borrow for current expenditures, and the net debt was reduced \$908,000.

This year brought a very large increase in the expenditure for streets which was carried still further in 1892 and succeeding years. Street improvements were now being made from loans authorized by the legislature outside the debt limit, and the limit was fast becoming of no effect. Greater borrowing was necessary in 1892, some of which was for annually-recurring expenditures. The erection of more suitable buildings for the institutions called for large appropriations in 1892 and several succeeding years.

In spite of the financial storm of 1893 expenditures continued their upward movement. Though the tax receipts fell off this year, the total receipts were greater, due to a considerable extent to large receipts from the water department. At this time the water receipts were responding to the efforts of the administration to make the department self-supporting.

In 1894 there began the most rapid rise in expenditures which took place in this period. Expenditures, inclusive of the state tax, which gave little concern at this time, were \$20,706,534 in 1893, \$22,100,527 in 1894, \$23,421,277 in 1895, \$24,486,125 in 1896, and \$27,739,526 in 1897. A large part of the increase of 1894 was due to the expenditure of \$2,409,906 for parks and public grounds, by far the largest expenditure in the history of the park system. The cost of adding to the water system was also responsible for a large increase. As taxation could not meet the great advance in municipal expenditure now taking place, borrowing, made easy by the legislature, was resorted to on a much larger scale than ever before. Almost every permanent improvement could now be met by loans, outside the limit; the right to borrow within the limit was thus available for objects which should have been paid for from taxes. Large loans in 1894 raised the net debt by \$3,622,000, the largest increase up to that time in the period.

The very great municipal activity in 1895 was in strange contrast to the lethargy then prevailing in private business. Large increases were made in the police force; a substantial addition was made to the fire department; about \$700,000 more was spent for streets; and the expenditure for extensions in the water system was at the high point of the period. The legislature of

1895 granted the right to borrow for schoolhouse construction outside the limit. This year saw the first great expenditure for subways. The increase in the net debt was \$3,562,000.

In 1896 the family which had already given Boston two mayors gave the city a third. Josiah Quincy was elected under the provisions of chapter 449 of 1895 for a two-year term. In 1898 he took office again. Like the first and second Quincy, he came at a time of very great increase in municipal expenditures. But, whereas his predecessors started the movements which led, in the case of the first Quincy, to the Faneuil Hall improvement, and, in the case of the second, to the building of the waterworks, the third Quincy brought a movement already begun to its culmination. His term, however, was not given simply to carrying out the policies of earlier administrations. He incorporated in the financial policy of Boston the principle that it was the business of the city to expend money for objects that would bring to her poorest citizens some of the elementary comforts enjoyed by her richer ones. As a result of his endeavors, Boston made a good beginning in a system of playgrounds and gymnasias, and provided far more adequate bathing facilities.

The greatest increase in the expenditures of 1896 was for streets, which advanced about \$1,100,000. The subway appropriation was \$400,000 larger than in the previous year. Schools demanded \$300,000 more. To meet such increases the ordinary receipts contributed a substantial amount. The tax rate of \$12.90 brought in about \$500,000 more, and the water receipts, which had made a remarkable advance from \$2,146,888 in 1894 to \$2,872,969 in 1895, contributed about \$250,000 more in 1896. But the brunt of these great expenditures had to be met by borrowing. The total loans of the year were \$8,274,000, making an increase in the net debt of \$5,186,000.

The year 1897 saw the greatest increase in expenditures in the period — about \$3,250,000. The expenditure of \$27,739,526 reached in that year was not exceeded until 1901. About \$2,000,000 of this increase was for streets. Of this important branch, sewers were demanding \$800,000 more than in the previous year; the long-neglected system was now being put into

better condition from funds borrowed outside the limit. Bridge expenditures rose about \$450,000 this year on account of the new Charlestown bridge. School expenditure was almost \$400,000 greater. The receipts, under the influence of a tax rate of \$13.00, increased almost \$1,000,000. The net debt advanced, however, \$5,603,000. It now stood at \$51,482,000, over twice what it was at the beginning of the period, and \$20,000,000 more than it was at the end of 1893. The last five years had seen an average annual increase of \$4,000,000. Meanwhile the tax rate, under the working of the law of 1885, advanced from \$12.80 to \$13.00.

Expenditures in 1898 were about \$1,700,000 below those of 1897. The increase in the net debt was \$2,740,000. The tax rate in 1898 was \$13.60.

In 1899 expenditures advanced to almost the figure reached in 1897. An increase in the expenditures for streets and schools was largely responsible. The growth of school expenditure from \$2,499,573 in 1894 to \$5,739,510 in 1904 is noteworthy. Though a great part of this increase was for new schoolhouses, and was met by borrowing, a considerable part of the advance was for current expenditures, and was met from taxes. Chapter 400 of 1898 and its amendments, imposing a limit on the appropriations of the independent school committee, appear to have been liberal measures.

The inadequacy of the nine-dollar tax law led in 1900 to a limit of \$10.50. The debt limit was raised to 2½ per cent. This more liberal tax limit, in conjunction with a less rapid increase in expenditures, made possible the restriction of borrowing to a smaller scale and to a more legitimate field.

In 1900 Thomas N. Hart was called again to the office of mayor. The first year of his administration saw expenditures below those of 1899. With almost full advantage taken of the new \$10.50 law the receipts of the city were increased \$1,500,000. Under these circumstances the net debt showed a decrease. Most of the remarkable reduction of \$6,948,000 made in this year was, however, not accomplished by the use of ordinary receipts but by the employment of \$5,000,000, paid in 1898 as the first instalment on the purchase price of the reservoir system.

Expenditures were not slow in overtaking the new receipts of the city. In 1901 there was an increase in practically every branch, amounting in all to about \$1,400,000. But for the final payment on the waterworks the net debt would have increased this year, instead of showing a decrease of \$4,233,000. The tax rate in 1901 was \$14.90.

Beginning with 1902, Patrick A. Collins was twice elected mayor. During his first term expenditures increased from \$28,550,375 in 1901 to \$30,212,106 in 1902, and \$32,110,718 in 1903. The increase in the first year was due principally to larger rapid transit appropriations and to an increase of about \$1,000,000 in the expenditure for parks and public grounds.

Almost all of this increase for parks was due to the collection of the first metropolitan park assessment, which included the levies of 1900 and 1901. The importance of the various metropolitan assessments, expenditures beyond the control of the city, was rapidly becoming apparent. In 1908 the metropolitan assessments were: sewer, \$262,095; water, \$1,789,315; park, \$634,583; a total of \$2,685,994. These demanded in the last year of the period 8 per cent of the total expenditures of the city, inclusive of the state tax.

The tax rate for 1902 was lowered to \$14.80. Boston, however, was taking full advantage of her right to tax, except to the extent of 40 cents on every \$1,000 of assessable property which was to be used for schoolhouse construction. The reason for this decline is found in the smaller debt requirements, resulting from the cancellation of Cochituate water bonds. With her receipts about the same as in 1901 and her expenditures about \$1,700,000 greater, Boston was forced in 1902 to add \$6,936,000 to her net debt. The policy of borrowing on the slightest excuse was again rapidly becoming the rule.

Expenditures in 1903 were about \$1,900,000 greater than in 1902. In this year expenditures for streets were the highest in the period, in fact, the highest in the history of the city. Beginning with this year, the state tax demanded more and more of the city's receipts. From \$541,920 in 1902 the quota of Boston rose to \$903,200 in 1903 and to \$1,978,350 in 1908. The assessment

of 1908 was the largest in the history of the city, the next largest being that of 1867 which was \$1,694,150. The state tax at the end of the period was responsible for 6 per cent of the city's expenditures. But for this sudden growth in the demands of the state, the expenditures of 1908 would have been only \$800,000 greater than those of 1902. The year 1903 added \$4,128,000 to the net debt.

The expenditures of 1904 were practically the same as those of 1903. School expenditures reached the record figure of \$5,739,510. Street expenditures fell off somewhat; much less was spent from now on for streets proper and more for sewers and drains. The net debt increased \$4,211,000.

An increase of \$560,000 in the expenditures of 1905 was due almost entirely to an increase in the state tax. School expenditures fell back \$1,000,000 to a level maintained during the rest of the period. The legislature was becoming less liberal in its supervision of schoolhouse loans. The expenditures for rapid transit reached their highest point — \$2,678,524. The net debt advanced in 1905 \$4,106,000.

In the years 1906 and 1907 John F. Fitzgerald was mayor. In 1906 the total expenditures, inclusive of the state tax, were \$100,000 less than in 1905. As the state tax fell about \$180,000 this year, it meant that the city's own expenditures were about \$80,000 greater than in 1905. The sudden jump in 1906 in the interest charge on the city debt from \$2,470,626 to \$3,020,658 called attention to the fact that at no slow rate the loan policy of the city was diverting a larger and larger part of the ordinary receipts from the needs of the present to the debts of the past. Expenditures had not increased very rapidly since 1897, and yet the debt was rising every year. The large payment from the state for the reservoir system had checked the growth of the city's debt, but had substituted a metropolitan debt. Receipts could not keep pace with the expenditures which the citizens of Boston demanded. In spite of her heavy borrowings, many felt that much-needed municipal work was being postponed. It was this situation that finally compelled the appointment of the finance commission of 1907 to suggest how the city might live within its

means, and at the same time meet the legitimate demands of its citizens.

Increasing receipts, accompanied by stationary expenditures, resulted in a much smaller increase in the net debt in 1906; it advanced \$2,288,000. The story of 1907 is practically the same as that of 1906. Expenditures were stationary and the net debt advanced somewhat less — \$1,960,000.

The last year of the period was the first year of Mayor George A. Hibbard's term. The Mayor went into office with the avowed purpose of reducing expenditures and at the same time maintaining the efficiency of the municipal machine. When we consider the difficulties which stood in the way of a mayor bent on retrenchment, we must conclude that Mayor Hibbard accomplished a good deal. A large part of the city's expenditures, such as the debt requirements, the state tax, the metropolitan and other assessments, and to a great degree the appropriations for the school and police departments, it was not within the power of the mayor to reduce. The introduction of economies in the departments which had suffered most from political patronage naturally met with great opposition. The Mayor was able, however, to reduce the city's expenditures, exclusive of the state tax, \$1,150,000. The increase in the net debt was kept down to \$1,255,000, \$1,000,000 less than was productively invested that year in the subway system. The part which the finance commission took in recommending many of these economies amply justified its appointment.

The period 1887 to 1908 was on the whole one of increase in expenditures, the most rapid advance falling in the years 1894 to 1897. Unable to raise within the tax limit the money needed for improvements, often not even all the money demanded for ordinary expenditures, the city adopted the probably more agreeable policy of constant borrowing. When the debt limit was insufficient to provide the desired loans, the legislature was easily prevailed upon to permit borrowing "outside the limit." As a result, the net city debt rose in this period from \$24,712,000 to \$72,036,000, and metropolitan obligations came into existence to the extent of about \$40,000,000 more.

CHAPTER VII

CONCLUSION

WE have now studied in detail the development of the municipal needs of Boston during eighty-seven years under the charter. We have seen the budget estimates increase in that time from about \$200,000, the amount required to meet the few wants of a town of forty-five thousand inhabitants, to over \$30,000,000, the cost of supplying municipal conveniences to 650,000 people. The per capita cost increased in the meantime from about \$4.40 to \$45.00. This remarkable advance represents the cost of obtaining increasingly better service in the old departments of town expenditure, of extending them, and of introducing many new branches of municipal activity. The money needed for the accomplishment of this great change was obtained by an increase in the tax rate from \$3.65 to \$16.50, by the development of new sources of income, by the sale of the public lands, and by the creation of a debt of over \$100,000,000.

The course of the city's finances was influenced by the changing forms of government. The incorporation of the town in 1822 made possible a more rapid development under the representative form of government, although it also stimulated expenditures and accustomed the taxpayers to a permanent debt. The charter of 1822 was not without defects; the larger part of the administrative functions of the city was intrusted to the board of mayor and aldermen, a provision which prevented unity and responsibility in the executive department. This defect was somewhat remedied by the position of the mayor as chairman of the upper branch of the council. By placing themselves at the head of important committees, the early mayors were able to obtain a certain unity of action. The revision of 1854 removed the mayor from his position on the board and in return gave him a qualified veto, a change which strengthened the rule of the committees. The rapid growth of the city after the War made clearer the inability

of the aldermen to control the administration of affairs in a large community. The extravagance of the years preceding the crisis of 1873 and the inefficient service rendered by certain departments were due in part to the committee system.

The complete separation of the legislative from the executive did not come until 1885, although the establishment of commissioners over several departments after 1870 marks the turning point in the power of the aldermen. The new charter gave the mayor the power of appointing the heads of departments, who, in turn, were given complete control of their own departments. The members of the city council were expressly forbidden to take part in executive affairs.

Though the charter of 1885 made distinct improvements in the government of Boston, certain defects became apparent as time went on. The most important of these were: first, the requirement that the mayor's appointees should be confirmed by the board of aldermen, second, the failure of the act to name any penalty in case of interference by the city council or any of its members with the work of the executive branch, and, finally, the lack of a proper check on the appointments of the mayor. These defects made easier the uneconomical and sometimes illegal use of the city's funds.

Fortunately for Boston, the changes recommended by the finance commission of 1907 were adopted by the city. The new charter increased the power of the mayor by extending his term to four years, subject to a recall after two years. It gave him full power of appointment, limited only by the certification of the civil service commission. The city council was made more efficient, more amenable to public opinion, and more difficult of access to ward politicians, by its reduction to a single chamber of but nine members, elected at large for three-year terms. A penalty was imposed for infraction of the rule against interference with the work of the executive; a permanent finance commission was established; and provisions, making more likely the passage of an economical budget, were put in force.

Effective as are the provisions of the new charter, they are not effective enough to insure good government without the intelli-

gent coöperation of the electorate. While the charter makes more probable the election of honest and efficient officials, it does not guarantee such action. If inefficient or dishonest men are elected through the failure of the voter to perform his duty, their power to do mischief, will, it is true, be limited; it cannot be annulled by charter provisions.

The development of the municipality falls naturally into five periods. The first, 1822 to 1844, has many of the characteristics of the old town economy. Except for the Faneuil Hall improvement, carried out by Mayor Quincy, no great undertakings were attempted. An advance was made, however, in the organization of many of the departments, especially the police and the fire. A step was made toward a scientific classification of the inmates of the institutions. Several new branches of expenditure were introduced, such as the cleaning of streets and the maintaining of common sewers. The growth of municipal needs during the first period can be measured by the advance of the per capita expenditure from \$4.00 to \$7.00. A debt of \$784,000 was acquired; the tax rate rose from \$3.65 to \$6.00.

In the period 1845 to 1859 Boston assumed more the appearance of a municipality. The work of all branches was carried on upon a much larger scale. Much was expended for the widening of streets, the laying of sewers, the preparation of the public lands for sale, and the construction of various public buildings, such as the new jail and the house of industry on Deer Island. The cost of many undertakings, formerly classed as extraordinary, became ordinary. The greatest work was the construction of the Cochituate water system. The per capita expenditure rose from \$7.00 to \$20.00. The debt stood at \$7,524,000 at the end of the period; the tax rate, at \$9.70.

The period 1860 to 1873 was one of extraordinary activity. It opened with large demands for the preservation of the Union, and closed with tremendous expenditures for public improvements. Among the accomplishments of this period were the construction of the Chestnut Hill Reservoir, the reduction of Fort Hill, the building of Atlantic Avenue, and the raising of the low territory. In 1870 the city took over the ferries. The Great Fire of

November, 1872, resulted in very large expenditures, especially for the widening of streets in the burnt district. The annexation of neighboring communities added to the cost of government toward the end of the period, bringing to the front many problems, such as streets, sewers and water. The per capita expenditure for 1873 was \$65.00, the highest in the history of the city. The period closed with a tax rate of \$12.80, and a net debt of \$27,719,000.

The period 1874 to 1886 was necessarily one of retrenchment. Commercial depression demanded a cessation of all but the very necessary activities. Consequently, we find expenditures at the end of the period essentially where they were at the beginning. Advances were made, however, in the standard of municipal service, particularly in the department of institutions. The city was forced to undertake two great works, the construction of the Sudbury water system and the building of a line of intercepting sewers, these improvements not being capable of postponement. The period saw the beginning of the public park system. Retrenchment, combined with the growth of population, permitted a decline in the per capita expenditure to \$36.00. The tax rate in 1886 was \$12.70. The net debt at the end of the period stood at \$26,487,000.

During the period 1887 to 1908 the general movement of expenditures was steadily upward. The long period of retrenchment left Boston with many tasks to accomplish. Millions of dollars were demanded for schoolhouses, streets, sewers, parks and public institutions. Municipal activity went into new fields. Civic responsibility for the children of its less-favored citizens brought the playground. A keener interest in the future of these same children required the appropriation of large sums for schools of a technical character. A far-seeing policy directed to the solution of the rapid transit problem called for the expenditure of millions in the building of subways. The period also saw the establishment of the great metropolitan systems which made possible a more economical satisfaction of certain vital wants.

The ever-insistent demand for new services carried the per capita expenditure to \$47.00 in 1908. The low tax limit made

impossible the meeting of expenditures from ordinary receipts. Consequently, constant recourse was had to the use of the city's credit. The debt of Boston advanced, easily pushing aside the barriers erected by the legislature, until at the end of the period it stood, including her share of the metropolitan debts, at over \$100,000,000, a per capita burden of about \$175. Interest and sinking fund requirements, not included in the tax limit, were an important force in raising the tax rate to \$16.50 in 1908.

From the second period onward, we find frequent allusions to the high per capita cost of municipal government in Boston. The causes of this phenomenon are numerous. In the first place, it is very probable that the citizens of Boston demanded a high standard of service, a fact seen plainly in the street-cleaning, lighting, and school departments.

Moreover, after 1844 there was considerable expenditure that might be deemed extravagant, especially in the construction of schoolhouses and other public buildings. This fault was most evident in the years immediately following the War. Corruption was also an element after the War.

A further cause is found in the geographical situation of Boston. The city could not grow in population except at great cost. To provide homes for her citizens, she made large expenditures in preparing the public lands for sale, and in making the necessary drainage improvements. Moreover, the city spent large amounts in securing adequate territory for the expansion of her commercial interests. The reduction of Fort Hill and the building of Atlantic Avenue are examples of such improvements.

Besides, the town bequeathed to the city a most miserable system of streets. Two reasons may be given for the perpetuation of this evil to a time when its removal required a very great expenditure of public money. In the first place, the early governments did not plan enough for the future; in the second place, their inability to charge any part of the cost upon the abutter deterred them from undertaking extensive improvements. When the growth of the city required the immediate widening of streets in the business district at enormous cost, the city government was unable to secure power to levy adequate special assess-

ments. The constant expenditure for additional supplies of water on account of wasteful consumption was also an important factor.

In her municipal investments Boston met with success and failure. Her markets were profitable. Her real estate ventures, if we exclude the raising of the low territories carried out with a non-fiscal purpose, were successful. Her waterworks, on the other hand, were unprofitable, most administrations yielding to the demand for low rates. A more general adoption of the meter system would have prevented much waste. The ferries were decidedly unprofitable. The subway system gave at the end of the period every indication of being successful. Fortunately for the taxpayers, all the receipts from the subways, except part of those from the East Boston Tunnel, came from rentals paid by the railway companies.

The expenditures of Boston will continue to grow; even the per capita figure will probably increase somewhat. Her tax rate will also rise, though more gradually than in the past. The greatest expenditures of the next generation will be for streets and kindred objects, and for subway construction. Boston is already committed to the policy of sewer and drainage improvement and to the building of subways. Before long she will be forced to expend millions in street-widening; her progress demands it. Fortunately for Boston chapter 536 of 1913 now gives her the power to levy special assessments for street improvements up to the full special benefit, not exceeding the cost of the improvement. Moreover, there is no limit, as formerly, to the assessment area.

The abuse of the city's borrowing power, so marked in the history of the municipality, must be continually guarded against. A real debt limit must be maintained. It cannot be expected that the practice of almost a century can be permanently given up without aid from the outside. This easy method of letting the future taxpayers supply the wants of the present finds, unfortunately, few vigorous opponents. If no other check should be imposed upon Boston, the debt limit should be enforced.

On the other hand, the tax limit should be removed. It has simply given an entirely unnecessary stimulus to borrowing; it

has but made firmer the hold of a bad habit. Extravagant expenditure, fostered by the use of the city's credit, has, moreover, pushed up the tax rate, for interest and sinking fund payments cannot be indefinitely postponed. The expenditures of Boston have become so largely of the recurring type that the field for the loan can be greatly restricted without bringing serious variations into her tax rate.

The motive which led to the limitation of 1885 was the fear that the abnormally high tax rate of 1884 would be maintained. There was nothing in the history of the city's finances to justify such a fear. The electorate of Boston will have to change very radically before a low tax rate will cease to be one of the surest ways of securing reelection. The fact that in the last period the debt limit gave way and not the tax limit shows which way the tide runs.

Moreover, the removal of the tax limit will help to awaken the tax-paying portion of the electorate. The fancied security of the limit has caused the business man to neglect civic responsibilities. As soon as he realizes that his tax bill may become an important part of his expenditures, he will make the business of the city his business. Then will the framers of the charter fully realize their hopes. The coöperation of the voters will give Boston an honest and efficient government.

APPENDIX I

EXPENDITURES, 1818-1859

Year	General Government	Police	Fire	Institutions	Public Grounds	Streets, Sewers, Etc.	Library	Schools
1818	\$11,677.36	\$8,779.91	\$1,661.88	\$12,490.65	\$637.62	\$29,214.07	.....	\$40,056.08
1819	14,824.03	8,820.42	1,161.06	32,578.76	1,556.54	34,392.46	.....	36,826.30
1820	8,503.29	8,768.40	2,026.26	18,784.77	3,784.31	27,975.12	.....	44,241.43
1821 ¹	12,000.00	9,600.00	2,500.00	40,000.00	1,500.00	33,600.00	.....	44,500.00
1822	54,737.12	8,899.52	2,766.02	17,938.26	591.62	42,261.60	.....	73,626.04
1823	54,029.24	10,232.39	8,387.70	52,160.75	4,500.14	80,002.27	.....	74,386.76
1824	28,769.12	10,263.53	2,505.83	58,547.63	61,485.93	69,509.72	.....	65,736.81
1825	28,804.09	8,898.02	21,134.84	55,906.47	528.94	110,766.39	.....	76,154.38
1826	32,625.20	9,985.21	25,488.08	50,139.99	2,500.00	717,852.70	.....	58,401.34
1827	39,864.71	19,754.56	11,133.57	33,076.76	925.95	106,340.07	.....	56,229.28
1828	29,808.99	11,360.76	20,031.42	36,810.32	1,765.53	75,263.07	.....	53,368.04
1829	31,534.08	11,996.00	25,592.27	37,123.06	996.00	75,876.92	.....	52,335.55
1830	54,014.14	11,333.51	12,033.19	39,384.30	1,969.94	74,600.53	.....	55,329.65
1831	36,625.55	12,040.47	12,799.64	40,498.28	2,930.86	95,267.05	.....	55,276.66
1832	35,953.73	12,527.48	17,999.31	61,591.55	2,076.86	220,126.54	.....	65,509.43
1833	77,066.21	21,116.64	15,974.50	44,773.17	1,854.30	241,137.83	.....	90,654.19
1834	104,643.26	30,830.73	26,427.60	56,106.40	3,493.47	209,413.00	.....	90,680.25
1835	93,764.76	31,887.75	25,014.80	68,366.60	6,314.83	240,237.37	.....	120,244.38
1836	62,659.18	26,942.07	49,849.52	70,782.60	86,783.61	283,118.75	.....	106,919.30
1837	44,504.76	34,723.08	56,723.36	54,450.31	13,810.62	213,753.38	.....	116,095.33
1838	46,825.71	44,382.32	46,328.22	63,167.06	3,991.65	169,434.59	.....	156,821.07
1839	78,398.44	45,602.39	45,927.44	68,218.16	11,353.38	272,274.99	.....	156,102.99
1840	65,721.33	46,434.12	42,082.19	78,837.66	4,830.74	114,875.53	.....	119,455.70
1841	50,801.56	48,925.84	38,758.43	85,520.53	2,480.97	145,843.18	.....	154,260.53
1842	43,667.50	53,159.14	35,728.31	85,802.12	4,744.48	154,723.19	.....	138,771.91
1843	42,304.54	55,732.85	40,601.72	77,701.71	4,059.01	138,305.42	.....	216,629.01
1844	45,194.37	57,667.56	44,272.54	80,814.88	1,768.21	173,186.71	.....	211,238.25
1845	49,499.80	73,351.90	74,563.21	80,515.27	3,397.15	277,218.36	.....	225,739.48
1846	54,007.11	75,496.35	73,669.79	112,349.12	6,788.02	518,374.26	.....	299,195.91
1847	54,126.72	88,941.06	79,982.88	126,066.90	119,173.06	538,739.80	.....	389,707.55
1848	199,504.29	101,946.96	75,612.64	125,598.23	11,157.21	590,850.15	.....	303,653.69
1849	212,615.46	118,536.68	62,861.45	226,609.10	21,521.55	500,188.70	\$240.41	315,339.33
1850	267,761.63	124,386.80	63,290.34	248,496.65	11,893.34	453,571.36	92.25	325,913.72
1851	128,520.02	144,903.83	78,417.95	233,806.81	24,813.21	559,767.59	696.57	297,666.80
1852	86,143.53	128,949.86	72,075.41	176,777.05	19,340.71	568,477.46	39,539.86	330,231.33
1853	96,971.41	139,391.92	90,340.91	194,466.53	35,370.90	560,088.87	84,525.63	272,300.25
1854	98,071.21	173,895.43	93,748.57	200,314.80	35,451.02	614,280.53	12,300.70	389,879.18
1855	101,875.34	204,485.73	94,804.01	259,768.26	30,893.28	709,568.49	90,329.54	442,670.96
1856	86,493.87	201,909.07	98,919.84	211,948.91	26,265.34	1,008,887.45	108,864.46	350,953.42
1857	97,384.77	216,657.82	118,764.46	303,475.10	60,491.13	1,324,591.69	145,550.10	346,622.99
1858	100,492.88	235,699.89	113,690.55	230,576.44	40,000.34	1,244,219.45	23,856.59	460,794.18
1859	112,457.45	225,853.22	132,267.01	263,128.24	36,499.94	1,048,054.66	39,561.97	519,031.73

¹ The figures for 1821 are estimated.

EXPENDITURES, 1818-1859

Water	County of Suffolk ²	Miscellaneous	Total	Interest	Total	State Tax	Total	Year
....	\$21,828.00	\$6,746.58	\$133,092.15	\$2,123.21	\$135,215.36	\$21,965.33	\$157,180.69	1818
....	23,871.00	11,529.06	105,559.63	1,023.80	106,583.43	22,001.33	188,644.76	1819
....	29,768.40	6,377.61	150,229.59	....	150,229.59	21,749.43	171,979.02	1820
....	30,000.00	13,000.00	186,700.00	....	186,700.00	....	186,700.00	1821
....	31,204.79	6,549.52	238,574.49	2,029.73	240,604.22	24,117.02	264,721.24	1822
....	30,833.70	8,032.25	322,565.20	6,522.40	329,087.60	26,550.50	355,638.10	1823
....	33,560.14	11,824.96	342,203.67	14,203.18	356,406.85	26,606.50	383,013.35	1824
....	28,330.28	4,451.09	334,974.50	13,341.43	348,315.93	26,898.50	375,214.43	1825
....	37,634.69	10,470.20	945,097.41	39,503.68	984,601.09	....	984,601.09	1826
....	34,037.06	6,693.43	299,055.39	52,257.56	351,314.95	....	351,314.95	1827
....	33,806.42	6,227.85	270,716.30	51,189.51	321,905.81	....	321,905.81	1828
....	33,080.73	8,618.14	277,152.75	47,804.72	324,957.47	12,437.50	337,394.97	1829
....	33,450.50	8,972.01	291,087.77	46,372.42	337,460.19	24,874.50	362,334.69	1830
....	29,173.78	8,582.77	287,415.06	43,391.94	330,807.00	12,437.00	343,244.00	1831
....	37,581.99	6,995.91	460,362.80	45,931.33	506,294.13	24,874.00	531,168.13	1832
....	39,650.91	19,086.46	551,314.51	53,084.84	604,399.05	....	604,399.05	1833
....	41,931.91	15,165.49	578,692.11	62,977.17	641,669.28	....	641,669.28	1834
....	38,355.45	16,715.54	640,937.48	60,673.74	701,611.22	....	701,611.22	1835
....	42,578.70	15,687.60	745,321.33	71,592.52	816,913.85	....	816,913.85	1836
....	51,590.11	30,538.89	616,189.84	79,362.16	695,552.00	....	695,552.00	1837
....	62,626.75	19,534.32	613,111.69	82,742.06	695,854.65	....	695,854.65	1838
....	54,313.31	19,469.82	751,660.92	89,368.04	841,028.96	....	841,028.96	1839
....	44,044.50	21,626.74	737,908.31	95,075.77	832,984.28	....	832,984.28	1840
....	46,466.57	26,809.03	599,866.64	88,481.39	688,348.03	....	688,348.03	1841
....	56,115.30	23,299.24	596,011.19	84,111.31	680,122.50	....	680,122.50	1842
....	48,465.80	32,644.02	656,444.08	77,062.24	733,506.32	....	733,506.32	1843
....	55,411.16	25,674.95	694,828.63	70,975.41	765,804.04	25,488.75	791,292.79	1844
....	59,176.88	46,032.79	889,494.84	59,118.55	948,613.39	25,488.75	974,102.14	1845
\$421,156.94	64,765.28	60,774.88	1,686,577.66	56,368.86	1,742,946.52	....	1,742,946.52	1846
1,667,028.27	69,220.21	104,312.07	3,237,299.42	56,279.95	3,293,579.97	....	3,293,579.97	1847
1,754,875.27	88,284.50	57,893.67	3,309,376.61	69,568.38	3,378,944.99	....	3,378,944.99	1848
814,784.12	92,559.49	35,191.20	2,400,447.49	85,419.58	2,485,867.07	....	2,485,867.07	1849
644,519.55	97,175.81	65,075.88	2,302,177.33	93,205.39	2,395,382.62	....	2,395,382.62	1850
436,046.95	100,863.42	90,919.46	2,096,422.61	102,441.88	2,198,864.49	....	2,198,864.49	1851
413,122.82	107,037.72	73,659.31	2,015,347.06	105,254.07	2,120,601.63	....	2,120,601.63	1852
344,718.21	134,115.00	66,510.24	2,017,899.87	124,544.71	2,142,444.58	98,691.00	2,241,135.58	1853
344,475.66	159,924.34	101,657.38	2,223,999.42	129,530.00	2,353,529.42	98,691.00	2,452,220.42	1854
329,319.17	187,437.09	95,100.32	2,546,252.19	101,194.94	2,647,447.13	148,036.50	2,795,483.63	1855
355,300.98	191,422.26	124,230.94	2,765,197.44	113,772.21	2,878,969.65	155,509.95	3,034,479.60	1856
376,213.98	207,359.41	88,764.44	3,282,875.89	118,733.37	3,401,609.26	137,945.05	3,739,554.31	1857
394,340.86	190,112.60	82,227.79	3,125,011.17	166,595.66	3,291,606.83	107,608.44	3,399,215.27	1858
675,368.60	207,478.40	72,835.31	3,325,536.53	153,841.21	3,479,377.74	98,694.00	3,578,071.74	1859

² Though not a town payment, practically all the expenditures of Suffolk County fell upon the taxpayers of Boston. For purposes of comparison with the figures after 1821, I have included the expenditures of the county previous to 1822 in this table.

EXPENDITURES, 1860-1908

Year	General Government	Police	Fire	Institutions	Public Grounds	Streets, Sewers, Etc.	Library	Schools
1860	\$121,975.14	\$230,837.63	\$116,416.13	\$229,700.89	\$84,625.27	\$1,196,113.49	\$24,756.57	\$632,385.01
1861	156,735.29	284,135.95	91,320.71	367,667.83	76,060.98	880,539.13	31,062.88	575,169.66
1862	161,764.63	250,661.71	106,338.81	686,976.69	56,148.41	824,601.67	29,513.33	534,867.01
1863	262,583.44	328,194.61	124,325.91	645,547.62	37,343.13	645,562.24	32,512.28	471,343.28
1864	295,759.81	368,821.78	157,077.31	642,793.02	39,584.64	793,918.91	36,106.00	643,774.68
1865	389,681.76	432,187.22	189,417.40	525,512.61	43,586.12	942,656.52	38,056.00	776,375.22
1866	176,832.93	532,440.88	187,878.97	705,932.94	84,049.29	1,172,281.78	44,692.39	781,280.60
1867	209,241.06	434,594.66	263,537.25	567,374.69	159,102.46	1,719,145.61	59,766.11	961,497.21
1868	262,846.91	568,225.63	295,540.11	711,861.72	157,652.47	2,903,477.26	57,343.33	1,329,287.78
1869	316,720.02	566,086.87	380,874.78	628,200.08	130,685.74	5,619,640.12	....	1,602,750.46
1870	286,407.11	578,344.96	456,323.47	623,853.21	129,390.07	4,998,789.93	71,220.00	1,575,279.07
1871	310,934.16	609,980.59	491,394.24	636,472.88	139,317.93	5,214,508.61	101,679.97	1,315,880.33
1872	335,135.25	657,185.25	736,526.70	876,800.58	160,992.48	6,562,313.06	102,466.01	1,748,197.59
1873	357,373.90	736,396.43	812,205.31	779,584.78	171,574.62	9,382,860.61	145,452.69	1,865,720.29
1874	450,504.19	882,987.22	736,566.31	810,833.90	183,825.11	4,875,768.41	181,549.29	2,081,043.35
1875	500,683.37	877,643.45	625,293.68	996,394.24	178,547.45	4,462,075.63	129,439.26	2,015,380.84
1876	469,103.85	866,528.36	600,237.41	896,777.18	171,496.08	3,283,978.95	119,646.31	1,816,615.49
1877	422,693.26	854,802.63	573,063.45	841,788.42	507,346.75	2,816,441.22	137,744.69	1,756,440.84
1878	449,097.64	837,907.68	566,729.47	802,377.57	278,819.28	3,138,263.04	125,036.99	1,759,885.90
1879	422,518.58	855,197.01	566,585.11	831,382.46	248,712.70	3,441,242.23	121,978.69	1,652,245.29
1880	467,373.94	881,153.81	599,033.18	881,547.86	245,597.45	3,780,778.05	117,156.39	1,775,037.15
1881	607,383.83	931,336.22	566,381.51	897,749.93	352,000.87	3,832,765.12	123,284.99	1,710,105.95
1882	584,809.97	928,762.84	597,022.41	1,002,552.73	952,807.17	4,508,686.47	132,286.05	1,680,791.22
1883	641,057.69	947,807.69	658,365.26	964,064.85	887,400.29	4,484,529.48	288,036.08	1,908,055.28
1884	586,768.31	979,923.68	765,631.98	1,234,297.13	746,968.75	3,994,876.52	182,396.18	1,983,567.19
1885	606,634.26	987,763.99	757,093.90	1,078,189.31	893,296.39	3,092,540.49	118,037.03	2,036,468.98
1886	633,459.33	1,147,868.76	789,176.89	1,097,542.55	398,614.90	3,653,186.87	199,747.18	1,782,063.45
1887	685,757.66	1,160,108.95	829,866.60	1,158,717.47	1,131,618.59	3,650,364.50	137,245.31	1,915,426.42
1888	720,305.85	1,272,224.48	884,201.84	1,089,113.08	778,957.63	3,914,944.61	248,379.40	1,979,326.15
1889	805,474.76	1,279,044.10	882,146.34	1,100,197.96	679,738.96	3,799,754.93	544,353.07	2,266,338.78
1890	877,785.20	1,273,378.43	1,059,420.97	1,091,101.66	1,038,707.21	3,762,147.73	684,342.71	2,121,744.34
1891	738,187.04	956,627.26	822,471.62	837,997.94	1,216,752.74	4,254,340.50	307,584.45	2,028,754.71
1892	961,049.09	1,271,384.07	1,056,077.63	1,311,616.22	1,273,853.87	5,329,424.03	423,657.82	2,559,566.92
1893	966,030.87	1,311,743.42	1,087,730.92	1,811,632.59	1,670,095.83	5,041,030.47	456,264.52	2,291,974.13
1894	1,046,579.69	1,336,342.81	1,117,228.19	1,794,818.36	2,409,096.81	5,095,562.44	539,826.73	2,499,573.97
1895	997,441.34	1,510,528.28	1,205,872.48	1,776,285.24	1,298,300.86	5,797,964.16	395,053.82	2,728,692.17
1896	1,215,641.16	1,729,176.22	1,234,635.89	1,791,495.64	705,958.06	6,884,938.40	327,289.37	3,033,006.69
1897	1,413,682.40	1,678,537.52	1,329,602.32	1,533,630.11	1,204,677.99	8,838,090.44	283,020.94	3,415,163.17
1898	1,440,366.63	1,689,449.36	1,222,833.40	1,590,659.61	830,310.78	8,475,988.57	324,368.38	3,303,059.82
1899	1,694,399.27	1,648,716.43	1,246,994.67	1,575,019.34	1,002,777.43	9,547,616.14	303,212.32	3,653,019.95
1900	1,477,549.91	1,672,853.05	1,236,314.74	1,600,841.50	873,485.03	8,972,340.22	311,295.79	3,714,659.13
1901	1,673,814.08	1,786,510.99	1,366,347.91	1,796,251.22	619,721.08	9,269,603.21	324,808.10	4,007,343.73
1902	1,769,645.47	1,838,295.64	1,369,162.98	1,842,957.64	1,642,157.82	8,703,276.72	315,924.99	4,314,147.21
1903	1,612,074.35	1,886,954.05	1,310,415.17	1,976,221.52	978,995.48	9,064,020.20	326,201.50	4,998,766.14
1904	1,526,416.75	1,911,235.00	1,334,905.69	1,717,623.13	1,212,214.72	9,600,972.35	330,219.54	5,739,510.48
1905	1,534,506.92	1,946,712.03	1,342,115.32	1,495,039.53	856,734.58	9,415,584.42	325,607.80	4,711,655.34
1906	1,635,108.63	1,941,873.14	1,438,501.90	1,555,075.54	1,470,253.51	8,658,340.92	340,375.57	4,562,947.34
1907	1,954,311.13	1,936,402.64	1,519,796.20	1,741,569.23	1,229,345.11	7,926,930.36	338,957.45	4,689,552.94
1908	1,721,369.04	2,000,190.65	1,552,043.14	1,949,229.16	1,200,363.64	6,226,111.76	327,733.69	4,732,611.22

EXPENDITURES, 1860-1908

Water	County of Suffolk	Rapid Transit	Miscellaneous	Total	Interest	Total	State Tax	Total	Year
\$404,970.78	\$174,850.24	....	\$121,953.16	\$3,338,593.31	\$161,953.68	\$3,500,546.99	\$82,245.00	\$3,582,791.99	'60
378,436.26	170,225.21	....	157,924.01	3,170,177.91	173,599.00	3,343,776.91	94,575.00	3,438,351.91	'61
413,483.11	153,594.98	....	1,040,968.61	4,258,918.96	366,217.03	4,625,135.99	578,270.56	5,203,406.55	'62
530,607.47	152,867.32	....	356,701.84	3,408,014.14	389,814.13	3,797,828.27	1,269,626.41	5,067,454.68	'63
765,556.81	146,619.60	....	667,855.20	4,557,867.76	845,796.90	5,403,664.66	756,600.00	6,160,264.66	'64
688,665.03	173,050.06	....	162,660.21	4,361,848.15	435,472.69	4,797,320.84	1,592,501.00	6,389,821.84	'65
873,260.79	205,937.10	....	200,848.18	4,965,435.85	551,693.92	5,517,129.77	1,016,490.00	6,533,619.77	'66
1,114,832.77	233,245.65	....	164,140.35	5,877,477.82	762,032.80	6,639,510.62	1,604,150.00	8,333,660.62	'67
1,788,015.65	226,488.17	....	145,126.32	8,445,865.35	547,331.87	8,993,197.22	723,140.00	9,716,337.22	'68
1,562,602.22	314,840.81	....	198,351.63	11,320,761.73	641,489.33	11,962,251.06	903,925.00	12,866,176.06	'69
1,596,673.50	272,342.38	....	158,668.03	10,747,591.73	815,166.88	11,562,758.61	933,775.00	12,496,533.61	'70
1,224,396.59	271,941.38	....	142,996.78	10,459,529.46	1,023,613.26	11,483,142.72	933,775.00	12,416,917.72	'71
1,160,028.18	337,526.05	....	273,561.04	13,031,334.55	1,557,106.35	14,588,440.90	736,480.00	14,024,020.90	'72
1,398,702.36	317,702.71	....	95,612.23	16,056,185.93	1,756,680.01	17,812,874.94	828,540.00	18,641,414.94	'73
1,944,059.74	372,321.99	....	106,443.86	12,625,903.37	2,029,051.02	14,654,954.39	802,120.00	15,457,074.39	'74
2,687,172.19	361,510.29	....	138,431.06	12,972,571.46	1,704,288.39	14,676,859.85	802,120.00	15,478,979.85	'75
3,358,734.12	342,696.92	....	108,524.99	12,037,619.08	1,758,142.51	13,795,761.59	742,932.00	14,538,693.59	'76
2,641,408.49	328,646.92	....	138,852.61	11,019,229.28	1,641,240.65	12,660,469.93	619,110.00	13,279,579.93	'77
1,984,838.75	327,833.50	....	69,690.11	10,341,358.93	1,666,754.56	12,008,113.49	412,740.00	12,420,853.49	'78
1,587,648.94	296,140.82	....	100,076.49	10,123,728.32	1,670,147.66	11,793,875.98	266,370.00	12,060,245.98	'79
1,667,416.53	305,871.68	....	119,422.45	10,840,388.49	1,535,549.91	12,375,938.40	619,110.00	12,995,048.40	'80
1,472,825.38	338,261.12	....	100,693.08	10,932,788.90	1,527,144.96	12,459,933.86	619,110.00	13,079,043.86	'81
1,592,954.19	362,908.06	....	118,444.42	12,462,025.53	1,492,377.19	13,954,402.72	825,480.00	14,779,882.72	'82
1,771,406.48	368,355.40	....	105,632.77	13,025,311.27	1,533,972.32	14,559,283.59	578,055.00	15,137,338.59	'83
2,001,648.75	393,785.77	....	121,552.16	12,991,446.43	1,520,900.10	14,512,346.53	770,740.00	15,283,086.53	'84
1,955,406.23	852,613.93	....	141,890.05	12,519,934.56	1,511,413.41	14,031,347.97	578,055.00	14,609,402.97	'85
2,110,060.85	999,056.20	....	167,356.04	12,978,133.92	1,498,729.78	14,476,863.70	555,870.00	15,032,733.70	'86
2,327,706.63	1,086,026.43	....	150,826.51	14,233,665.07	1,543,835.53	15,777,500.60	833,805.00	16,611,305.60	'87
2,159,777.04	1,334,640.21	....	151,623.18	14,524,493.47	1,536,359.18	16,060,852.65	833,805.00	16,894,657.65	'88
2,102,058.42	1,268,914.25	....	205,154.42	14,933,175.99	1,551,557.71	16,484,733.70	738,020.00	17,222,753.70	'89
2,316,901.63	1,133,602.50	....	121,266.15	15,480,398.53	1,624,218.20	17,104,616.73	645,767.50	17,750,384.23	'90
1,824,835.20	777,574.66	....	102,740.29	13,867,866.41	1,296,689.51	15,164,555.92	553,515.00	15,718,070.92	'91
2,381,121.37	1,183,664.12	\$17,532.43	132,068.76	17,901,016.33	1,689,571.05	19,590,587.38	640,062.50	20,230,649.88	'92
2,396,759.71	1,025,635.16	....	124,997.53	18,183,895.15	1,608,264.05	19,792,159.20	914,375.00	20,706,534.20	'93
2,896,038.85	995,934.98	39,771.44	137,336.23	19,908,920.50	1,460,106.71	21,369,027.21	731,500.00	22,100,527.21	'94
3,361,242.26	941,532.20	1,068,021.88	196,618.06	21,277,534.75	1,604,823.14	22,882,357.89	538,920.00	23,421,277.89	'95
2,589,786.57	967,664.53	1,465,100.74	180,431.64	22,125,124.91	1,732,260.47	23,857,385.38	628,740.00	24,486,125.38	'96
2,404,140.53	1,183,814.35	1,642,372.94	231,536.01	25,158,268.72	1,952,518.20	27,110,786.92	628,740.00	27,739,526.92	'97
2,298,324.04	1,290,254.84	719,746.52	184,375.07	23,369,528.92	2,130,677.54	25,500,206.46	536,670.00	26,036,876.46	'98
2,451,799.48	1,327,321.05	369,815.17	191,025.65	25,011,717.80	2,081,256.26	27,092,974.06	536,670.00	27,629,644.06	'99
2,455,257.31	1,287,273.51	591,256.34	265,305.48	24,458,441.01	2,138,488.39	26,596,929.40	536,670.00	27,133,599.40	'00
2,589,936.99	1,471,136.21	547,309.91	337,713.71	25,790,496.57	2,127,638.62	27,918,135.19	632,240.00	28,550,375.19	'01
2,546,608.90	1,701,469.91	1,142,242.94	389,876.57	27,575,766.79	2,094,419.40	29,670,186.28	541,920.00	30,212,106.28	'02
2,767,006.24	1,501,969.93	1,236,900.89	431,485.62	28,992,001.18	2,215,517.36	31,207,518.54	903,200.00	32,110,718.54	'03
2,866,707.64	1,452,971.64	1,048,409.77	387,713.71	29,128,833.63	2,340,323.02	31,469,156.65	900,125.00	32,369,281.65	'04
2,985,805.51	1,378,262.52	2,678,524.21	339,091.75	29,009,640.83	2,470,626.86	31,480,267.69	1,440,200.00	32,920,467.69	'05
2,927,741.45	1,397,418.23	1,958,145.95	659,190.03	28,545,071.21	3,020,658.30	31,565,729.51	1,260,175.00	32,825,904.51	'06
2,733,573.91	1,500,990.41	2,017,832.98	846,499.42	28,434,854.78	3,138,232.73	31,573,087.51	1,438,800.00	33,011,887.51	'07
2,695,761.00	1,505,615.76	2,330,006.75	930,106.62	27,231,142.43	3,193,661.84	30,424,804.27	1,978,350.00	32,403,154.27	'08

GENERAL GOVERNMENT, 1860-1908

Year	Salaries	Other	Total
1860	\$81,056.66	\$40,918.48	\$121,975.14
1861	87,682.85	69,052.44	156,735.29
1862	88,118.59	73,646.04	161,764.63
1863	92,127.03	170,456.41	262,583.44
1864	106,965.88	188,793.93	295,759.81
1865	114,350.71	275,331.05	389,681.76
1866	91,396.90	85,436.03	176,832.93
1867	98,069.53	111,171.53	209,241.06
1868	113,953.57	148,893.34	262,846.91
1869	117,577.39	199,142.63	316,720.02
1870	142,054.67	144,352.44	286,407.11
1871	153,545.50	157,408.66	310,954.16
1872	159,908.50	165,226.75	325,135.25
1873	167,440.86	189,933.04	357,373.90
1874	229,784.18	220,720.01	450,504.19
1875	276,779.92	223,903.45	500,683.37
1876	300,770.89	168,332.96	469,103.85
1877	278,348.78	144,344.48	422,693.26
1878	352,504.67	97,471.97	449,976.64
1879	309,088.55	113,430.03	422,518.58
1880	292,725.73	174,648.21	467,373.94
1881	326,724.19	280,659.64	607,383.83
1882	345,072.80	239,737.17	584,809.97
1883	385,826.91	255,230.78	641,057.69
1884	375,846.14	210,952.18	586,798.32
1885	392,752.77	213,881.49	606,634.26
1886	412,891.79	220,567.54	633,459.33
1887	439,292.51	246,465.15	685,757.66
1888	456,065.59	264,240.26	720,305.85
1889	482,282.34	323,192.42	805,474.76
1890	618,543.07	259,242.13	877,785.20
1891	526,149.29	212,037.75	738,187.04
1892	690,270.59	270,778.50	961,049.09
1893	728,396.24	237,634.63	966,030.87
1894	764,773.76	281,805.93	1,046,579.69
1895	749,673.55	247,767.79	997,441.34
1896	905,455.19	310,185.97	1,215,641.16
1897	916,902.62	496,779.78	1,413,682.40
1898	969,118.79	471,247.84	1,440,366.63
1899	941,441.60	752,957.67	1,694,399.27
1900	951,221.10	526,328.81	1,477,549.91
1901	1,062,909.56	610,904.52	1,673,814.08
1902	1,083,871.25	685,774.22	1,769,645.47
1903	1,067,626.20	545,348.15	1,612,974.35
1904	1,057,943.20	468,473.55	1,526,416.75
1905	1,069,009.12	465,497.80	1,534,506.92
1906	1,118,501.87	516,696.76	1,635,198.61
1907	1,241,075.16	713,235.97	1,954,311.13
1908	1,091,061.59	630,307.45	1,721,369.04

COUNTY OF SUFFOLK, 1825-1878

(No distinction made between "Mayor's Drafts" and "County Drafts" after 1878)

Year	Mayor's Drafts	County Drafts			Total	Other	Total
		Jurors, Wit- nesses, etc.	Other	Total			
1825	\$6,103.50	\$13,821.66	\$8,405.12	\$22,226.78	\$28,330.28	.....	.....
1826	7,426.07	16,926.39	13,282.23	30,208.62	37,634.69	.....	.....
1827	5,996.46	15,606.17	12,434.43	28,040.60	34,037.06	.....	.....
1828	7,812.85	14,923.20	13,070.37	27,993.57	35,806.42	.....	.....
1829	5,881.57	15,351.37	11,847.79	27,199.16	33,080.73	.....	.....
1830	4,148.76	15,470.66	13,831.08	29,301.74	33,450.50	.....	.....
1831	5,060.32	13,702.28	10,411.18	24,113.46	29,173.78	.....	.....
1832	4,558.60	17,999.82	15,023.57	33,023.39	37,581.99	.....	.....
1833	5,197.63	19,474.30	14,978.98	34,453.28	39,650.91	.....	.....
1834	5,351.81	19,749.88	15,039.52	34,789.40	40,141.21	\$1,790.70	\$41,931.91
1835	6,598.60	23,060.55	6,992.69	30,053.24	36,651.93	1,703.52	38,355.45
1836	7,160.19	23,500.00	10,493.00	33,993.00	41,153.19	1,425.51	42,578.70
1837	8,433.62	29,635.15	9,195.20	38,830.35	47,263.97	4,326.14	51,590.11
1838	9,649.34	31,994.48	13,482.02	45,476.50	55,125.84	7,500.91	62,626.75
1839	11,996.10	30,302.30	11,502.91	41,805.21	53,801.31	512.00	54,313.31
1840	3,064.50	31,665.73	3,811.49	35,477.22	39,001.72	5,042.78	44,044.50
1841	.....	35,469.17	3,478.26	38,947.43	38,947.43	7,519.14	46,466.57
1842	11,156.81	40,860.69	4,097.80	44,958.49	56,115.30	.....	.....
1843	7,061.82	38,321.94	3,082.04	41,403.98	48,405.80	.....	.....
1844	6,063.19	44,555.21	4,792.76	49,347.97	55,411.16	.....	.....
1845	9,021.15	46,821.47	3,334.26	50,155.73	59,176.88	.....	.....
1846	5,615.34	51,744.85	7,405.09	59,149.94	64,705.22	.....	.....
1847	6,334.87	53,473.51	9,411.83	62,885.34	69,220.21	.....	.....
1848	8,523.04	70,113.54	9,647.92	79,761.46	88,284.50	.....	.....
1849	9,764.59	69,978.13	12,816.77	82,794.90	92,559.49	.....	.....
1850	7,028.42	73,858.31	16,289.08	90,147.39	97,175.81	.....	.....
1851	6,135.16	77,107.06	17,621.20	94,728.26	100,863.42	.....	.....
1852	11,579.43	72,817.95	22,640.34	95,458.29	107,037.72	.....	.....
1853	27,849.48	82,080.51	24,185.01	106,265.52	134,115.00	.....	.....
1854	11,946.07	115,236.95	32,741.92	147,978.87	159,924.94	.....	.....
1855	37,872.42	117,020.00	32,544.67	149,564.67	187,437.09	.....	.....
1856	50,539.12	112,683.79	28,199.35	140,883.14	191,422.26	.....	.....
1857	52,909.97	124,561.91	29,887.53	154,449.44	207,359.41	.....	.....
1858	43,877.38	118,337.88	27,897.34	146,235.22	190,112.60	.....	.....
1859	64,185.83	114,656.42	28,636.15	143,292.57	207,478.40	.....	.....
1860	32,977.97	.....	.....	141,872.27	174,850.24	.....	.....
1861	44,099.73	.....	.....	126,125.48	170,225.21	.....	.....
1862	42,487.83	.....	.....	111,107.15	153,594.98	.....	.....
1863	44,522.75	.....	.....	108,344.57	152,867.32	.....	.....
1864	34,776.85	.....	.....	111,842.75	146,619.60	.....	.....
1865	45,553.82	.....	.....	127,496.24	173,050.06	.....	.....
1866	74,520.28	.....	.....	131,416.82	205,937.10	.....	.....
1867	71,541.02	.....	.....	161,704.63	233,245.65	.....	.....
1868	94,459.19	.....	.....	172,028.98	226,488.17	.....	.....
1869	153,589.64	.....	.....	161,251.17	314,840.81	.....	.....
1870	97,958.43	.....	.....	174,383.95	272,342.38	.....	.....
1871	99,451.78	.....	.....	172,489.60	271,941.38	.....	.....
1872	147,677.89	.....	.....	189,849.06	337,526.95	.....	.....
1873	128,607.71	.....	.....	182,095.00	310,702.71	.....	.....
1874	168,680.30	.....	.....	203,641.69	372,321.99	.....	.....
1875	137,474.43	.....	.....	224,035.86	361,510.29	.....	.....
1876	132,681.58	.....	.....	213,294.76	345,976.34	.....	.....
1877	165,756.50	.....	.....	162,890.42	328,646.92	.....	.....
1878	195,992.88	.....	.....	131,840.62	327,833.50	.....	.....

POLICE, 1818-1859

Year	Watch	Constables	Station Houses	Total
1818	\$8,325.21	\$454.10	.....	\$8,779.91
1819	8,357.52	461.90	.....	8,820.42
1820	8,245.00	523.40	.....	8,768.40
1821 ¹	.....	.....	.....	9,600.00
1822	8,157.52	742.00	.....	8,899.52
1823	8,841.49	1,390.90	.....	10,232.39
1824	8,363.53	1,900.00	.....	10,263.53
1825	7,578.06	1,319.96	.....	8,898.02
1826	8,581.51	1,403.70	.....	9,985.21
1827	9,447.16	1,307.40	.....	10,754.56
1828	9,911.54	1,449.22	.....	11,360.76
1829	11,323.24	672.76	.....	11,996.00
1830	10,708.75	624.76	.....	11,333.51
1831	11,146.48	893.99	.....	12,040.47
1832	11,350.90	1,170.58	.....	12,527.48
1833	19,918.37	1,198.25	.....	21,116.64
1834	27,201.35	3,629.38	.....	30,830.73
1835	29,392.91	2,494.84	.....	31,887.75
1836	24,659.70	2,282.37	.....	26,942.07
1837	30,103.41	4,619.67	.....	34,723.08
1838	38,388.54	5,993.78	.....	44,382.32
1839	37,987.18	7,615.21	.....	45,602.39
1840	40,827.79	5,606.33	.....	46,434.12
1841	43,187.50	5,738.34	.....	48,925.84
1842	45,766.36	7,392.78	.....	53,159.14
1843	47,240.90	8,491.95	.....	55,732.85
1844	47,905.39	9,762.17	.....	57,667.56
1845	61,119.76	12,232.14	.....	73,351.90
1846	58,995.24	16,501.11	.....	75,496.35
1847	60,037.95	28,903.11	.....	88,941.06
1848	67,092.18	34,854.78	.....	101,946.96
1849	77,779.72	40,756.96	.....	118,536.68
1850	84,606.28	39,780.52	.....	124,386.80
1851	95,651.86	49,251.97	.....	144,903.83
1852	87,803.96	41,145.90	.....	128,949.86
1853	89,347.01	50,044.91	.....	139,391.92
1854	117,216.59	58,678.84	.....	173,895.43
1855	\$188,286.06		\$16,199.16	204,485.73
1856	108,537.97		3,372.00	201,909.97
1857	204,602.70		12,055.12	216,657.82
1858	220,199.89		15,500.00	235,699.89
1859	225,853.22		.....	225,853.22

¹ Estimated

POLICE, 1860-1908

Year	General	Station Houses	Total
1860	\$230,837.63	.....	\$230,837.63
1861	252,464.53	\$31,671.42	284,135.95
1862	250,661.71	.....	250,661.71
1863	328,194.61	.....	328,194.61
1864	340,821.78	28,000.00	368,821.78
1865	396,533.97	35,653.25	432,187.22
1866	454,079.09	78,361.79	532,440.88
1867	433,944.66	650.00	434,594.66
1868	512,829.84	55,395.79	568,225.63
1869	552,921.30	13,165.57	566,086.87
1870	.....	.....	578,344.96
1871	575,324.28	34,662.31	609,986.59
1872	643,042.62	14,744.09	657,786.71
1873	683,892.78	52,503.65	736,396.43
1874	815,185.41	67,801.81	882,987.22
1875	867,773.96	9,869.49	877,643.45
1876	866,528.36	.....	866,528.36
1877	854,802.63	.....	854,802.63
1878	837,907.68	.....	837,907.68
1879	835,201.85	19,995.16	855,197.01
1880	881,153.81	.....	881,153.81
1881	931,336.22	.....	931,336.22
1882	928,762.84	.....	928,762.84
1883	947,807.69	.....	947,807.69
1884	967,950.25	11,973.43	979,923.68
1885	980,910.44	6,853.95	987,763.99
1886	1,108,452.79	39,415.97	1,147,868.76
1887	1,139,881.49	20,227.46	1,160,108.95
1888	1,271,990.58	233.90	1,272,224.48
1889	1,251,044.10	28,000.00	1,279,044.10
1890	1,235,157.62	38,220.81	1,273,378.43
1891	943,541.88	13,085.38	956,627.26
1892	1,237,121.73	34,202.34	1,271,384.07
1893	1,289,705.02	22,038.40	1,311,743.42
1894	1,327,536.75	8,806.06	1,336,342.81
1895	1,510,528.28	.....	1,510,528.28
1896	1,720,676.22	8,500.00	1,729,176.22
1897	1,677,875.63	661.89	1,678,537.52
1898	.....	.....	1,689,449.36
1899	.....	.....	1,648,716.43
1900	.....	.....	1,672,853.05
1901	.....	.....	1,786,510.99
1902	.....	.....	1,838,295.64
1903	.....	.....	1,886,954.05
1904	.....	.....	1,911,235.00
1905	.....	.....	1,946,712.93
1906	.....	.....	1,941,873.14
1907	.....	.....	1,936,402.64
1908	.....	.....	2,060,190.65

FIRE, 1818-1859

Year	Fire Dep't Proper	Engine Houses	Reservoirs	Total
1818	\$1,661.88	.....	.....	\$1,661.88
1819	1,161.06	.....	.....	1,161.06
1820	2,026.26	.....	.....	2,026.26
1821 ¹	.....	.....	.....	2,500.00
1822	2,766.02	.....	.....	2,766.02
1823	5,285.58	.....	\$3,102.12 ²	8,387.70
1824	2,505.83	.....	.....	2,505.83
1825	9,836.95	\$7,859.62	3,438.27	21,134.84
1826	21,362.42	.....	4,125.66	25,488.08
1827	5,300.00	3,985.47	1,848.10	11,133.57
1828	11,589.32	6,577.11	1,864.99	20,031.42
1829	15,496.53	6,097.10	3,998.64	25,592.27
1830	7,849.54	1,995.61	2,188.04	12,033.19
1831	6,841.39	2,372.23	2,986.02	12,199.64
1832	10,145.86	5,962.74	1,890.71	17,999.31
1833	10,994.42	2,989.27	1,990.81	15,974.50
1834	16,199.46	10,016.62	211.52	26,427.60
1835	19,954.60	3,618.34	1,441.86	25,014.80
1836	21,733.43	18,709.91	9,406.18	49,849.52
1837	40,682.14	8,191.95	7,849.27	56,723.36
1838	40,774.61	1,382.09	4,171.52	46,328.22
1839	42,223.70	1,455.05	2,248.69	45,927.44
1840	39,046.29	1,306.34	1,729.56	42,082.19
1841	38,085.72	672.71	.....	38,758.43
1842	33,199.99	692.99	1,835.33	35,728.31
1843	39,304.93	542.36	754.43	40,601.72
1844	41,576.78	645.42	2,050.34	44,272.54
1845	53,213.90	5,923.19	15,426.12	74,563.21
1846	59,360.65	4,854.10	9,455.04	73,669.79
1847	67,843.05	7,789.94	4,349.89	79,982.88
1848	70,062.35	4,541.91	1,008.38	75,612.64
1849	60,704.40	2,067.05	.....	62,861.45
1850	61,790.86	1,299.48	.....	63,290.34
1851	77,755.83	662.12	.....	78,417.95
1852	70,976.25	1,099.16	.....	72,075.41
1853	78,395.81	11,945.10	.....	90,340.91
1854	90,483.33	3,265.24	.....	93,748.57
1855	91,831.93	2,972.08	.....	94,804.01
1856	93,877.49	5,042.35	.....	98,919.84
1857	101,403.13	17,301.33	.....	118,764.46
1858	106,979.85	6,710.70	.....	113,690.55
1859	113,833.36	18,433.65	.....	132,267.01

¹ Estimated.² For wells and pumps.

FIRE, 1860-1908

Year	General	Engine Houses	Total
1860	\$112,098.53	\$4,317.60	\$116,416.13
1861	84,656.07	6,664.64	91,320.71
1862	95,459.66	10,879.15	106,338.81
1863	119,456.14	4,869.77	124,325.91
1864	145,330.39	11,740.92	157,077.31
1865	151,922.65	37,494.75	189,417.40
1866	177,743.81	10,135.16	187,878.97
1867	204,217.13	59,320.12	263,537.25
1868	269,789.34	25,750.77	295,540.11
1869	319,112.96	61,761.82	380,874.78
1870	434,397.13	21,926.34	456,323.47
1871	442,013.52	49,380.72	491,394.24
1872	645,817.90	90,708.80	736,526.70
1873	642,732.76	169,472.55	812,205.31
1874	631,398.51	105,167.80	736,566.31
1875	590,431.50	34,862.18	625,293.68
1876	591,287.20	8,950.21	600,237.41
1877	572,495.08	568.37	573,063.45
1878	566,729.47	.....	566,729.47
1879	566,585.11	.....	566,585.11
1880	599,033.18	.....	599,033.18
1881	566,381.51	.....	566,381.51
1882	588,432.41	8,590.00	597,022.41
1883	637,066.72	21,298.54	658,365.26
1884	696,017.15	69,614.83	765,631.98
1885	695,104.49	61,989.41	757,093.90
1886	716,763.74	72,413.15	789,176.89
1887	772,989.21	56,877.39	829,866.60
1888	853,824.10	30,377.65	884,201.84
1889	861,948.54	20,197.80	882,146.34
1890	952,570.51	106,850.46	1,059,420.97
1891	766,888.99	55,582.63	822,471.62
1892	989,225.26	66,852.37	1,056,077.63
1893	1,018,712.64	69,018.28	1,087,730.92
1894	1,059,442.02	57,786.17	1,117,228.19
1895	1,136,043.44	69,829.04	1,205,872.48
1896	1,224,286.56	10,349.33	1,234,635.89
1897	1,314,808.08	14,794.24	1,329,602.32
1898	1,182,354.94	40,478.46	1,222,833.40
1899	1,199,718.19	47,276.48	1,246,994.67
1900	1,209,122.02	27,192.72	1,236,314.74
1901	1,286,365.95	79,981.39	1,366,347.34
1902	1,318,102.39	51,060.59	1,369,162.98
1903	.....	.....	1,310,415.17
1904	.....	.....	1,334,905.69
1905	.....	.....	1,342,115.32
1906	.....	.....	1,438,501.90
1907	.....	.....	1,519,796.20
1908	.....	.....	1,552,043.14

INSTITUTIONS, 1818-1859

Year	Overseers	House of Industry	House of Reformation	House of Correction	Lunatic Hospital	Miscellaneous	Total
1818	\$12,490.65	.....	.....	.....	.....	.....	\$12,490.65
1819	32,578.76	.....	.....	.....	.....	.....	32,578.76
1820	18,784.77	.....	.....	.....	.....	.....	18,784.77
1821 ¹	.....	.....	.....	.....	.....	.....	40,000.00
1822	12,567.25	\$5,371.01	.....	.....	.....	.....	17,938.26
1823	25,610.60	26,550.15	.....	.....	.....	.....	52,160.75
1824	20,709.29	8,398.31	.....	\$29,440.03	.....	.....	58,547.63
1825	10,208.46	30,366.33	.....	15,331.68	.....	.....	55,906.47
1826	12,256.79	33,089.68	\$4,793.52	.....	.....	.....	50,139.99
1827	11,386.61	16,190.15	5,550.00	.....	.....	.....	33,076.76
1828	12,848.18	17,996.12	5,966.02	.....	.....	.....	36,810.32
1829	12,803.84	17,977.22	6,342.00	.....	.....	.....	37,123.06
1830	13,685.00	19,476.12	6,223.18	.....	.....	.....	39,384.30
1831	14,000.00	19,999.91	6,498.37	.....	.....	.....	40,498.28
1832	14,542.89	23,048.61	6,203.11	17,796.94	.....	.....	61,591.55
1833	8,929.86	18,527.80	8,398.52	8,916.99	.....	.....	44,773.17
1834	12,606.25	23,353.03	14,111.88	1,937.81	.....	\$4,097.43	56,106.40
1835	12,916.50	24,300.22	29,468.78	1,681.10	.....	.....	68,366.60
1836	9,708.54	23,084.41	27,440.79	10,548.86	.....	.....	70,782.60
1837	11,746.75	21,509.36	13,376.55	5,113.80	\$2,703.85	.....	54,450.31
1838	10,257.75	22,321.06	10,883.54	.....	19,704.71	.....	63,167.06
1839	11,831.75	21,995.53	9,490.02	3,998.69	20,902.17	.....	68,218.16
1840	12,000.00	24,682.45	8,993.82	8,996.11	14,660.08	9,504.30	78,837.66
1841	13,000.00	30,957.21	4,954.05	23,518.47	13,090.80	.....	85,520.53
1842	15,000.00	31,547.71	.....²	22,360.39	13,293.68	3,600.34	85,802.12
1843	15,000.00	30,707.08	.....	18,045.63	13,949.00	.....	77,701.71
1844	15,000.00	29,151.22	.....	18,553.15	17,710.51	.....	80,414.88
1845	15,700.00	28,000.00	.....	22,451.36	14,363.91	.....	80,515.27
1846	16,500.00	35,703.71	.....	24,514.34	35,631.07	.....	112,349.12
1847	21,000.00	40,168.80	.....	41,391.13	17,506.97	.....	126,066.90
1848	24,500.00	55,468.05	.....	28,091.45	17,538.73	.....	125,598.23
1849	24,500.00	140,419.45	.....	34,810.67	26,878.98	.....	226,609.10
1850	30,200.00	166,309.82	.....	32,851.30	19,135.53	.....	248,496.65
1851	28,200.00	151,016.29	.....	35,373.63	19,216.89	.....	233,806.81
1852	27,700.00	84,338.56	.....	44,725.22	20,013.27	.....	176,777.05
1853	30,000.00	102,676.82	.....	39,913.39	21,876.32	.....	194,466.53
1854	40,000.00	77,279.41	.....	57,285.52	25,749.87	.....	200,314.80
1855	45,000.00	69,104.88	.....	91,231.06	27,784.12	26,648.20	259,768.26
1856	49,300.00	69,462.56	.....	62,032.01	24,277.89	6,876.45	211,948.91
1857	62,800.00	104,958.11	.....	55,673.51	24,992.68	55,050.80	393,475.10
1858	58,000.00	84,549.87	.....	60,743.01	20,944.77	6,338.79	230,576.44
1859	60,000.00	108,389.84	.....	52,741.00	32,411.94	9,585.46	263,128.24

¹ Estimated.² House of Reformation was joined with House of Industry in 1842.

INSTITUTIONS, 1860-1908

Year	Overseers	House of Industry	House of Correction	Lunatic Hospital	Hospital	Soldiers' Relief	Miscellaneous	Total
1860	\$69,400.00	\$76,917.21	\$45,201.29	\$26,906.02	....	....	\$11,285.37	\$229,709.89
1861	70,200.00	68,905.86	40,454.81	25,997.35	\$23,377.82	\$129,309.00	9,422.09	367,667.83
1862	90,140.88	68,881.73	39,858.83	29,375.16	133,519.04	309,553.09	15,047.96	686,976.69
1863	39,000.00	85,792.29	38,971.66	32,316.97	136,622.84	297,328.33	15,515.53	645,547.62
1864	41,000.00	91,304.66	45,842.07	37,996.51	113,436.57	293,987.67	19,225.54	642,793.02
1865	44,500.00	87,202.73	51,018.21	68,275.80	133,274.49	117,409.30	23,772.08	525,512.61
1866	118,011.50	99,606.38	71,713.65	56,311.49	79,529.06	257,407.60	23,353.26	705,932.94
1867	72,091.82	118,042.11	70,765.76	59,161.39	109,143.75	109,179.79	28,990.07	567,374.69
1868	164,041.89	126,878.08	127,556.36	59,886.08	91,324.21	108,709.95	33,465.15	711,861.72
1869	85,846.50	113,823.97	74,381.12	76,336.39	98,978.16	102,845.29	75,997.65	628,209.08
1870	64,912.99	111,212.35	82,001.09	66,279.77	107,826.78	96,564.20	95,056.03	623,833.21
1871	67,182.21	137,291.83	66,196.28	63,278.33	113,371.05	99,042.41	99,210.77	636,472.88
1872	74,785.24	181,489.37	118,340.30	55,869.58	287,157.53	83,940.45	75,218.11	876,800.58
1873	86,920.74	191,730.39	84,765.03	60,599.55	112,722.81	83,435.12	138,085.53	779,584.78
1874	126,518.95	209,936.99	109,800.70	65,320.54	125,283.48	88,639.87	85,333.37	810,833.90
1875	127,433.41	217,580.24	97,018.16	60,189.77	273,655.54	84,219.50	135,697.62	996,304.24
1876	127,543.13	203,770.68	84,463.88	58,061.91	167,185.56	82,225.36	83,526.66	867,377.18
1877	110,438.10	246,462.05	89,942.53	53,000.73	162,490.92	81,629.51	97,824.58	841,788.42
1878	102,025.06	199,874.60	84,644.26	51,092.47	125,521.35	119,081.12	119,238.71	802,377.57
1879	102,195.51	271,437.52	79,223.94	44,999.42	120,181.92	91,445.66	121,898.49	821,382.46
1880	104,211.95	244,928.44	78,278.78	47,736.81	130,864.00	99,020.21	179,507.67	881,547.86
1881	104,951.55	251,765.29	85,111.91	44,999.11	145,708.94	100,310.55	164,902.58	897,749.93
1882	111,741.63	253,469.84	108,107.51	91,572.62	152,499.27	97,276.61	188,885.55	1,002,552.73
1883	112,978.83	264,442.23	96,209.00	59,998.16	154,334.88	92,475.79	183,625.96	964,064.85
1884	115,328.78	491,836.21	111,227.26	59,558.61	184,015.29	94,134.31	93,061.03	1,234,297.31
1885	119,126.30	350,740.46	98,050.55	....	187,948.22	97,052.74	225,270.42	1,078,189.13
1886	109,140.38	343,765.36	89,898.92	63,890.75	202,944.08	96,911.46	190,991.60	1,097,542.55
1887	104,399.14	171,999.20	102,247.72	88,018.61	215,972.05	99,516.82	376,563.93	1,158,777.47
1888	114,984.00	164,323.47	110,756.84 ¹	93,206.76	256,088.89	105,254.35	355,255.61	1,089,113.08
1889	110,006.69	163,652.40	100,035.96 ¹	82,579.04	295,136.81	117,498.75	331,324.27	1,110,197.96
1890	110,269.98	151,705.65	97,894.24 ¹	84,126.48	270,490.19	139,343.06	333,166.30	1,091,101.66
1891	75,912.01	117,424.68	67,875.14 ¹	63,163.95	189,714.62	122,655.04	269,127.64	837,997.94
1892	109,615.76	165,457.44	91,191.10 ¹	128,068.87	270,646.95	181,488.01	456,339.19	1,311,616.22
1893	112,544.78	214,065.32	97,592.36 ¹	373,039.25	511,665.78	187,334.61	412,982.85	1,811,632.59
1894	135,634.64	162,332.30	95,074.02 ¹	217,165.72	579,824.84	202,344.27	497,516.59	1,794,818.36
1895	125,718.52	165,870.49	94,711.79 ¹	152,046.78	662,655.74	204,311.30	465,682.41	1,776,285.24
1896	129,162.92	291,985.54	96,559.78 ¹	118,675.30	493,871.52	206,214.22	551,586.14	1,791,495.64
1897	133,898.49	164,623.67 ²	97,533.03 ³	330,489.03	524,329.88	217,866.90	64,889.11	1,533,630.11
1898	132,042.23	114,787.03 ²	177,620.53 ³	292,033.82	612,214.65	223,874.03	38,087.32	1,590,659.61
1899	129,381.62	182,062.03 ²	188,537.68 ³	315,777.04	481,916.68	224,265.54	53,084.73	1,575,019.34
1900	123,426.93	172,656.52 ²	194,939.66 ³	331,533.13	514,679.70	221,122.51	42,482.96	1,600,841.50
1901	121,000.89	167,268.87 ²	221,289.96 ³	386,855.98	622,723.48	234,296.89	41,915.15	1,796,251.22
1902	123,234.69	200,634.97 ²	233,588.96 ³	370,396.21	633,630.96	239,077.23	42,394.62	1,842,937.64
1903	132,274.35	187,114.10 ²	274,577.89 ³	496,262.82	595,506.92	245,853.24	44,632.20	1,976,221.52
1904	131,284.56	213,429.44 ²	186,017.49 ³	329,321.33	698,353.72	243,757.71	115,458.88	1,717,623.13
1905	132,690.20	216,335.68 ²	187,353.13 ³	170,998.08	489,605.52	248,941.94	49,114.98	1,495,039.53
1906	133,256.04	201,111.43 ²	193,302.80 ³	165,000.00	563,071.86	252,760.76	46,572.65	1,555,075.54
1907	133,292.22	239,109.94 ²	228,092.26 ³	170,685.00	667,647.65	254,184.10	48,558.06	1,741,569.23
1908	143,889.40	228,972.86 ²	212,156.47 ³	160,938.46	909,738.35	247,659.70	45,873.92	1,949,229.16

¹ A charge upon the County of Suffolk after 1887, and not included in total expenditure for institutions.² Pauper Institutions Department.³ Children's Institutions Department.

STREETS, 1818-1859

Year	Streets Proper			Lighting	Sewers	Bridges
	Widening and Extending	Paving and Repair	Total			
1818	\$1,167.70	\$12,826.15	\$13,993.85	\$7,680.22	.....	.....
1819	941.90	16,940.09	17,881.99	7,011.22	.....	.....
1820	330.00	13,292.32	13,622.32	6,274.93	.....	.....
1821 ¹	.....	.....	.....	.....	.....	.....
1822	2,717.46	23,090.90	25,808.36	9,347.52	.....	.....
1823	15,005.40	33,632.08	48,637.48	8,508.65	\$10,418.75	.....
1824	15,409.70	28,028.18	43,437.88	6,665.73	4,420.71	.....
1825	44,283.00	32,981.73	77,264.73	9,965.73	8,306.46	.....
1826	45,728.89	29,969.72	75,698.61	11,346.12	7,499.96	.....
1827	52,697.04	14,958.08	67,655.12	13,620.00	10,000.00	.....
1828	12,422.24	19,994.67	32,416.91	13,842.94	7,761.47	\$2,000.00
1829	18,895.10	19,997.55	38,892.65	13,048.80	4,998.27	2,700.00
1830	4,538.96	27,596.93	32,135.89	15,246.84	4,497.24	.....
1831	27,383.06	24,496.10	51,879.16	14,861.53	4,789.95	.....
1832	30,837.52	27,388.20	58,225.72	16,092.41	15,484.51	7,098.46
1833	116,465.58	34,951.22	151,416.80	18,976.39	16,994.71	.....
1834	116,056.09	32,082.71	148,138.80	19,612.80	14,135.21	.....
1835	109,787.42	58,986.78	168,774.20	18,916.29	15,776.63	.....
1836	145,877.54	57,847.29	203,724.83	18,561.88	10,864.99	6,449.99
1837	86,230.72	47,141.52	133,372.24	18,919.73	17,050.40	1,428.36
1838	54,143.29	46,917.82	101,061.11	21,085.62	8,985.03	2,787.63
1839	153,841.96	48,092.44	201,934.40	26,358.56	3,657.96	3,059.36
1840	13,508.62	37,663.84	51,172.46	28,247.92	2,613.91	2,040.29
1841	31,048.19	47,064.14	78,112.33	22,685.83	7,741.86	8,033.40
1842	43,897.55	47,759.00	91,656.55	21,061.28	3,324.82	7,166.75
1843	33,770.02	38,478.18	72,248.20	22,855.56	8,919.67	1,319.88
1844	57,108.94	38,731.99	95,840.93	25,388.92	8,774.82	2,487.13
1845	110,559.71	70,213.67	180,773.38	26,232.40	9,301.15	756.76
1846	179,635.28	106,357.06	285,992.37	33,813.83	16,705.68	8,396.11
1847	259,683.99	99,776.16	359,460.15	40,774.87	18,532.14	1,177.94
1848	198,317.08	166,249.97	364,567.05	49,661.84	25,840.63	3,635.23
1849	70,002.85	154,953.87	224,956.74	49,397.54	34,171.75	6,033.87
1850	28,414.19	147,395.45	175,809.64	64,626.30	44,525.38	4,427.96
1851	70,927.27	106,672.91	267,600.18	77,203.86	26,772.67	8,956.72
1852	78,943.68	184,953.10	263,896.78	84,841.39	33,186.28	1,823.19
1853	71,160.53	195,268.23	266,428.76	106,536.32	32,480.00	10,002.21
1854	101,269.76	188,904.03	290,173.79	123,734.54	34,155.95	13,996.27
1855	182,786.16	169,106.84	352,893.00	133,042.46	29,248.20	7,743.07
1856	208,359.59	182,780.38	391,139.97	127,242.60	7,766.53	151,792.61
1857	457,894.91	192,995.52	650,890.43	136,024.40	63,837.22	59,592.33
1858	432,312.96	193,049.79	625,362.75	134,578.50	38,259.58	54,130.54
1859	106,165.51	190,635.10	296,800.61	136,121.41	40,487.57	16,622.34

¹ Estimated

STREETS, 1818-1859

Ferries	Health	Lands	Miscellaneous	Total	Year
.....	\$7,950.00	.....	\$490.00	\$29,214.07	1818
.....	9,000.00	.....	499.25	34,392.46	1819
.....	7,500.00	.....	577.87	27,975.12	1820
.....	7,500.00	.....	.....	33,600.00	1821
.....	5,270.16	\$1,312.56	523.00	42,261.60	1822
.....	10,474.16	794.51	1,168.72	80,002.27	1823
.....	13,733.69	599.13	652.58	69,509.72	1824
.....	12,569.09	1,478.13	1,182.25	110,766.39	1825
.....	13,437.36	699.40	609,171.25	717,852.70	1826
.....	14,145.70	374.50	544.75	106,340.07	1827
.....	15,468.70	2,988.13	1,058.82	75,536.97	1828
.....	13,189.51	2,348.77	698.92	75,876.92	1829
.....	12,458.98	8,118.43	2,143.75	74,600.53	1830
.....	16,859.29	5,887.37	809.75	95,087.05	1831
.....	58,926.01	61,023.51	3,275.12	220,126.54	1832
.....	29,177.54	23,474.36	1,098.03	241,137.83	1833
.....	24,929.99	1,790.86	805.34	209,413.00	1834
.....	33,049.98	2,972.01	748.26	240,237.37	1835
.....	34,695.36	7,840.84	980.86	283,118.75	1836
.....	35,389.36	6,775.29	818.00	213,753.38	1837
.....	31,498.04	2,704.81	1,312.35	169,434.59	1838
.....	35,066.08	1,284.13	914.50	272,274.99	1839
.....	29,436.17	686.28	678.50	114,875.53	1840
.....	27,841.08	488.57	940.11	145,843.18	1841
.....	28,177.62	2,605.17	731.00	154,723.19	1842
.....	29,388.69	2,329.45	1,243.67	138,305.42	1843
.....	33,807.01	6,170.34	717.56	173,186.71	1844
.....	36,371.24	17,090.35	6,693.08	277,218.36	1845
.....	53,820.28	111,197.29	8,448.37	518,374.26	1846
.....	68,590.37	49,226.00	978.33	538,739.80	1847
.....	69,852.49	76,432.91	860.00	590,850.15	1848
.....	95,054.33	89,384.17	1,190.30	500,188.70	1849
.....	75,966.18	87,043.70	1,172.20	453,571.36	1850
.....	82,599.98	95,250.64	1,383.34	599,767.59	1851
.....	103,687.95	79,981.24	1,060.63	568,477.46	1852
.....	109,693.75	33,642.21	1,305.72	560,088.87	1853
.....	113,148.14	37,858.59	1,213.25	614,280.53	1854
.....	113,238.72	72,127.59	1,474.85	709,568.49	1855
.....	121,648.75	202,468.58	6,828.41	1,008,887.45	1856
.....	122,581.22	284,973.07	6,693.02	1,324,591.09	1857
\$125,000.00	120,517.05	139,410.37	6,954.66	1,244,219.45	1858
125,000.00	140,288.23	270,723.84	22,010.66	1,048,054.66	1859

STREETS, 1860-1908

Year	Streets Proper			Lighting	Sewers	Lands
	Widening and Extending	Paving and Repair	Total			
1860	\$335,805.43	\$204,533.82	\$540,339.25	\$138,282.84	\$55,816.96	\$302,391.37
1861	211,750.35	197,504.16	409,314.51	141,774.32	27,229.55	146,892.52
1862	130,229.46	158,403.14	297,632.60	159,716.04	16,005.99	156,525.07
1863	67,502.82	152,722.31	220,225.13	160,942.82	22,159.43	47,346.82
1864	179,076.81	157,546.94	336,623.75	190,871.04	18,760.74	17,987.95
1865	107,519.00	161,001.77	358,520.77	200,425.77	128,675.64	21,390.51
1866	167,800.61	264,783.28	432,583.89	219,495.00	60,553.09	107,622.44
1867	636,779.59	270,361.11	907,140.70	237,272.10	46,948.53	77,079.58
1868	1,211,175.46	409,814.75	1,620,990.21	277,167.23	83,290.90	540,325.38
1869	2,594,891.17	708,086.07	3,302,977.24	291,693.97	155,820.59	1,194,491.09
1870	2,066,971.33	874,046.59	2,941,017.92	324,755.51	130,749.13	897,892.45
1871	1,165,868.13	940,036.27	2,105,904.40	347,533.72	120,874.61	1,841,562.12
1872	3,349,824.30	956,815.20	4,306,639.50	356,562.83	174,000.00	645,458.49
1873	6,403,923.92	965,474.60	7,369,398.52	384,760.46	227,827.58	385,204.83
1874	1,539,055.40	1,254,403.18	2,793,518.58	440,909.73	241,392.93	250,390.81
1875	1,500,981.58	1,024,627.66	2,525,609.24	496,456.53	285,323.56	133,548.84
1876	698,885.56	939,816.15	1,638,701.71	479,937.80	223,376.47	9,050.50
1877	289,497.47	850,191.39	1,139,688.86	477,303.28	320,596.60	30,391.13
1878	355,921.44	694,936.61	1,050,858.05	443,336.69	662,756.03	277,325.48
1879	604,309.93	652,711.25	1,257,021.18	396,758.20	752,034.23	309,161.71
1880	423,295.18	993,042.45	1,416,937.63	398,165.11	1,111,255.09	86,771.14
1881	614,035.00	1,002,518.89	1,616,553.89	417,428.64	1,025,020.38	7,085.05
1882	892,301.27	1,099,371.49	1,991,672.76	454,168.71	1,197,214.74	16,689.77
1883	370,319.08	860,659.71	1,230,978.79	496,915.91	1,596,043.96	6,031.10
1884	318,630.76	1,248,415.30	1,567,046.06	481,001.98	760,710.31	688.28
1885	156,657.86	835,000.00	991,657.86	499,937.50	628,819.11	7,564.73
1886	575,749.35	853,190.68	1,428,940.03	524,923.45	751,612.46	1,620.85
1887	377,653.76	1,040,931.27	1,418,585.03	573,661.15	571,773.11	2,187.11
1888	167,816.88	986,577.71	1,154,394.59	566,961.91	1,018,800.86	874.16
1889	187,051.52	1,122,509.65	1,309,561.17	592,317.70	803,467.26	356.09
1890	285,486.59	1,049,157.98	1,334,644.57	541,757.64	768,788.41	.....
1891	165,537.49	1,740,687.94	1,915,225.43	420,179.21	750,464.03	.....
1892	525,443.11	1,667,921.96	2,193,365.07	582,113.83	804,369.95	.....
1893	758,644.36	1,397,410.99	2,156,055.35	572,293.70	605,317.52	.....
1894	1,003,175.31	1,455,106.41	2,458,281.72	573,110.42	465,018.90	.....
1895	2,018,530.16	1,320,227.77	3,338,757.93	582,418.66	393,370.13	.....
1896	2,616,224.97	1,514,893.71	4,131,118.68	601,239.65	485,817.58	.....
1897	2,918,843.52	1,725,284.68	4,644,128.20	619,947.80	1,285,776.60	.....
1898	2,005,797.29	1,172,332.48	3,178,129.77	651,276.41	1,100,145.09	.....
1899	2,444,238.06	1,189,861.39	3,634,099.45	678,915.35	1,774,549.87	.....
1900	2,119,487.94	1,508,974.06	3,628,462.00	728,121.94	1,821,282.51	.....
1901	2,037,925.75	2,416,642.53	4,454,568.28	770,424.68	1,378,759.84	.....
1902	1,732,224.18	1,779,005.88	3,511,230.06	772,079.16	1,569,107.19	.....
1903	2,444,002.15	1,710,164.52	4,154,166.67	776,053.99	2,220,996.44	.....
1904	1,251,983.98	1,900,864.02	3,152,848.00	809,592.53	2,773,865.44	.....
1905	1,148,944.03	1,821,405.53	2,970,349.56	813,581.34	2,226,632.54	.....
1906	661,058.70	1,814,280.81	2,475,348.51	826,804.01	2,003,325.01	.....
1907	1,302,559.45	975,231.63	2,277,791.08	840,016.93	1,897,445.58	.....
1908	663,617.59	833,981.43	1,497,599.02	809,510.06	1,535,714.23	.....

STREETS, 1860-1908

Bridges	Ferries	Health	Miscellaneous	Total	Year
\$9,184.08	.....	\$141,933.17	\$8,165.82	\$1,196,113.49	1860
6,184.58	.....	140,235.91	8,907.74	880,539.13	1861
6,066.55	\$5,000.00	141,403.84	42,251.58	824,601.67	1862
7,030.58	.....	150,521.30	37,336.16	645,562.24	1863
13,455.68	.....	199,681.97	16,537.78	793,918.91	1864
11,005.45	8,248.49	195,241.24	10,148.65	942,656.52	1865
49,766.07	19,196.55	265,674.89	17,389.85	1,172,281.78	1866
117,011.79	26,372.51	277,427.02	29,893.38	1,719,145.61	1867
38,983.86	6,474.12	314,385.29	27,860.27	2,903,477.26	1868
15,935.43	276,375.00	338,650.66	43,696.14	5,619,640.12	1869
84,079.22	212,645.99	342,288.33	65,361.47	4,998,789.93	1870
110,466.11	255,516.19	387,990.07	44,661.39	5,214,508.61	1871
318,277.71	242,555.44	466,300.97	52,518.12	6,562,313.06	1872
81,862.43	297,383.53	503,276.14	133,147.12	9,382,860.61	1873
257,804.36	265,408.72	519,969.46	106,254.82	4,875,768.41	1874
178,900.47	241,204.34	509,333.92	91,608.73	4,462,075.63	1875
195,573.46	199,193.63	466,117.35	72,028.03	3,283,978.95	1876
178,172.00	162,201.60	446,128.87	61,958.88	2,816,441.22	1877
65,296.40	164,237.69	414,840.42	59,612.28	3,138,263.04	1878
64,070.67	198,892.62	412,949.59	50,354.03	3,441,242.23	1879
112,678.77	168,788.50	432,596.54	53,585.27	3,780,778.05	1880
88,459.21	179,407.86	442,126.60	56,683.49	3,832,765.12	1881
73,479.87	239,612.91	473,438.44	62,409.27	4,508,686.47	1882
304,771.18	282,182.94	507,868.65	59,736.95	4,484,529.48	1883
278,084.83	300,617.83	546,379.69	60,347.54	3,994,876.52	1884
89,374.43	245,463.15	568,579.50	61,144.21	3,092,540.49	1885
112,485.87	201,230.01	566,734.60	65,630.60	3,653,186.87	1886
148,762.90	259,014.22	611,381.02	64,999.94	3,650,364.50	1887
277,383.26	214,846.24	606,859.70	74,823.91	3,914,944.61	1888
208,770.94	199,030.23	605,764.13	80,487.41	3,799,754.93	1889
172,627.31	225,505.72	645,014.61	73,809.47	3,762,147.73	1890
218,102.45	226,436.43	651,202.87	72,710.08	4,254,340.50	1891
368,942.48	233,066.01	1,041,012.50	106,554.19	5,329,424.03	1892
272,466.55	249,370.65	1,062,124.94	123,401.76	5,041,030.47	1893
255,818.38	224,441.04	1,023,090.37	95,792.61	5,095,562.44	1894
195,391.06	221,813.94	974,954.90	91,257.54	5,797,964.16	1895
269,049.33	249,737.05	1,058,144.27	89,831.84	6,884,938.40	1896
720,897.63	268,193.82	1,193,984.03	90,162.27	8,838,090.44	1897
836,581.17	348,722.08	1,255,714.60	105,419.45	8,475,988.57	1898
1,710,354.94	331,125.17	1,424,068.56	194,502.80	9,547,616.14	1899
923,593.97	345,163.99	1,424,553.49	101,261.32	8,972,349.22	1900
618,372.64	293,176.40	1,641,242.36	113,059.01	9,269,603.21	1901
721,397.17	300,382.26	1,728,699.00	100,381.88	8,703,276.72	1902
731,716.01	296,322.64	1,682,873.17	101,292.27	9,664,020.29	1903
791,434.68	264,072.06	1,708,638.96	100,520.68	9,600,972.35	1904
1,284,663.16	275,124.18	1,741,341.46	103,892.18	9,415,584.42	1905
1,109,852.16	301,739.11	1,782,910.29	158,370.83	8,658,349.92	1906
676,429.46	294,357.82	1,928,238.43	12,651.06	7,926,930.36	1907
370,302.78	249,068.39	1,763,917.28	.....	6,226,111.76	1908

SCHOOLS, 1818-1859

Year	Primary			All Other				Total
	Salaries	New Buildings	Total	Salaries	Other	New Buildings	Total	
1818	\$3,750.00	.....	\$3,750.00	\$20,863.05	\$2,099.30	\$13,343.73	\$36,306.08	\$40,056.08
1819	7,250.00	.....	7,250.00	25,100.00	3,078.41	1,397.89	29,576.30	36,826.30
1820	8,375.00	.....	8,375.00	25,430.55	2,322.76	8,113.12	35,866.43	44,241.43
1821 ¹	.....	.....	.....	.....	.....	.....	.....	44,500.00
1822	8,500.00	.....	8,500.00	35,255.35	4,855.75	25,014.94	65,126.04	73,626.04
1823	10,510.00	.....	10,510.00	37,739.95	4,099.13	22,037.68	63,876.76	74,386.76
1824	11,710.00	.....	11,710.00	39,243.35	3,665.47	11,117.99	54,026.81	65,736.81
1825	12,581.56	.....	12,581.56	36,752.00	3,884.93	22,935.89	63,572.82	76,154.38
1826	13,207.78	.....	13,207.78	36,557.22	4,228.36	4,407.98	45,193.56	58,401.34
1827	14,045.91	.....	14,045.91	34,721.83	4,401.54	3,000.00	42,183.37	56,229.28
1828	14,286.71	.....	14,286.71	33,142.43	5,938.90	.....	39,081.33	53,368.04
1829	14,373.46	.....	14,373.46	33,998.99	3,494.64	468.46	37,962.09	52,335.55
1830	14,933.46	.....	14,933.46	34,236.23	5,233.89	926.07	40,396.19	55,329.05
1831	16,491.88	\$400.00	16,891.88	29,311.98	9,072.80	.....	38,384.78	55,276.66
1832	16,859.16	.....	16,859.16	34,592.40	5,495.85	8,562.02	48,650.27	65,509.43
1833	17,364.70	.....	17,364.70	38,313.41	11,495.08	23,481.00	73,289.49	90,654.19
1834	17,833.11	12,363.86	30,196.97	41,807.37	12,198.16	6,477.75	60,483.28	90,680.25
1835	19,403.32	9,646.99	29,050.31	45,004.73	9,301.70	36,887.64	91,194.07	120,244.38
1836	23,976.23	4,841.95	28,818.18	53,429.70	10,946.39	13,725.03	78,101.12	106,919.30
1837	26,087.00	14,909.28	40,996.28	59,258.07	15,840.98	.....	75,099.05	116,095.33
1838	27,824.10	11,872.53	39,696.63	64,818.08	16,220.42	36,085.94	117,124.44	156,821.07
1839	29,905.35	15,609.35	45,514.70	68,958.78	19,292.44	22,337.07	110,588.29	156,102.99
1840	31,388.00	2,452.62	33,840.62	70,483.03	13,798.95	1,333.10	85,615.08	119,455.70
1841	32,924.55	12,457.25	45,381.80	73,258.83	14,305.10	21,314.80	108,873.73	154,260.53
1842	36,200.83	10,210.18	46,411.01	75,599.68	16,761.22	.....	92,360.90	138,771.91
1843	38,814.17	9,926.14	48,740.31	80,957.68	15,379.46	71,551.56	167,888.70	216,629.01
1844	40,197.06	12,502.27	52,700.23	89,005.11	21,118.46	48,414.45	158,538.02	211,238.25
1845	42,028.53	16,570.86	58,599.39	98,876.40	21,940.39	46,323.30	167,140.09	225,739.48
1846	61,887.13	24,592.02	86,479.15	104,675.34	25,589.81	82,451.61	212,716.76	299,195.61
1847	70,127.09	39,290.46	109,418.45	104,011.86	23,028.09	153,249.15	280,289.10	389,707.55
1848	77,166.22	35,923.72	113,089.94	118,060.84	36,935.67	35,567.24	190,563.75	303,653.69
1849	80,146.92	17,756.86	97,903.78	120,895.83	32,575.26	63,964.46	217,435.55	315,339.33
1850	79,648.47	51,010.69	130,659.16	125,464.60	39,820.82	29,969.14	195,254.56	325,913.72
1851	80,746.77	56,221.16	136,967.93	129,478.82	26,001.47	5,218.58	160,698.87	297,666.80
1852	84,739.79	35,823.09	120,562.88	130,531.18	36,053.08	43,084.19	209,668.45	330,231.33
1853	81,881.33	22,121.66	104,002.99	129,166.55	37,326.71	1,804.00	168,297.26	211,300.25
1854	98,764.34	24,163.35	122,927.69	147,022.09	40,215.52	79,713.88	266,951.49	389,879.18
1855	102,516.15	18,878.55	121,394.70	147,338.54	42,603.97	131,333.35	321,276.26	442,670.96
1856	105,902.26	11,078.43	116,980.69	148,994.80	43,957.10	41,020.83	233,972.73	350,953.42
1857	126,805.89	.....	126,805.89	170,108.89	49,483.21	225.00	219,817.10	346,622.99
1858	121,046.61	.....	121,046.61	178,382.44	56,178.71	105,186.42	339,747.47	460,794.18
1859	135,919.01	9,283.70	145,202.71	184,764.79	53,785.26	135,278.97	373,829.02	519,031.73

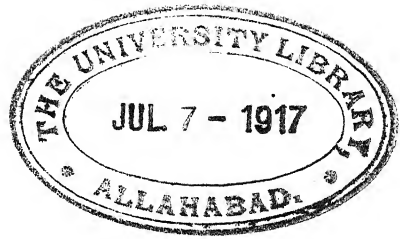
¹ Estimated.

SCHOOLS, 1860-1908

Year	Schoolhouses			Instructors	Other	Total
	Primary	Other	Total			
1860	\$101,865.07	\$121,988.21	\$223,853.28	\$287,202.93	\$121,328.80	\$632,385.01
1861	39,417.49	126,885.76	166,303.25	300,548.28	108,318.13	575,169.66
1862	100,337.53	7,800.21	108,137.74	311,063.93	115,665.34	534,867.01
1863	3,902.72	1,968.15	5,870.87	324,739.77	140,732.64	471,343.28
1864	26,793.68	63,816.16	90,609.84	372,430.84	180,734.00	643,774.68
1865	55,004.82	145,548.82	200,553.64	403,300.82	172,520.76	776,375.22
1866	76,421.77	25,153.32	101,575.09	492,796.66	186,908.85	781,280.60
1867	4,087.16	184,703.64	188,790.80	548,615.90	224,090.51	961,497.21
1868	100,024.70	246,586.08	346,610.78	719,628.04	263,048.96	1,329,287.78
1869	130,331.91	482,005.95	612,337.86	720,960.65	269,451.95	1,602,750.46
1870	134,024.12	399,655.59	443,679.71	816,344.66	315,254.70	1,575,279.07
1871	35,835.81	63,464.87	99,300.68	863,658.81	352,920.84	1,315,880.33
1872	9,546.00	446,178.68	455,724.68	929,852.41	362,620.50	1,748,197.59
1873	147,123.94	290,539.31	446,663.25	1,015,572.72	403,484.32	1,865,720.29
1874	134,977.50	221,692.24	356,669.74	1,217,008.92	507,364.69	2,081,043.35
1875	143,899.42	133,847.15	277,746.57	1,235,375.24	502,259.03	2,015,380.84
1876	3,880.35	132,971.95	136,861.30	1,211,796.67	467,957.52	1,866,615.49
1877	33,123.79	141,200.96	174,324.75	1,157,746.09	424,370.00	1,756,440.84
1878	26,261.42	213,961.56	240,222.98	1,117,027.51	402,635.41	1,759,885.90
1879	9,012.91	137,865.54	136,878.45	1,108,578.87	406,787.97	1,652,249.29
1880	61,732.31	153,627.33	215,359.64	1,112,932.69	446,744.82	1,775,037.15
1881	71,329.86	67,797.02	139,126.88	1,109,635.88	461,343.19	1,710,105.95
1882	39,727.00	77,901.73	77,628.73	1,123,154.90	480,007.59	1,680,791.22
1883	97,158.04	163,820.36	260,978.40	1,147,863.23	499,813.65	1,908,655.28
1884	146,722.10	339,451.06	476,173.16	1,170,751.71	336,642.32	1,983,567.19
1885	110,897.06	222,658.46	333,555.52	1,192,493.29	510,420.17	2,036,468.98
1886	22,534.44	111,074.34	133,608.78	1,213,806.24	434,648.43	1,782,063.45
1887	10,646.69	148,038.94	158,685.63	1,238,584.42	518,156.37	1,915,426.22
1888	379.98	121,260.92	121,640.90	1,274,349.17	574,336.08	1,970,326.15
1889	55,207.84	311,361.61	366,569.45	1,332,573.87	567,195.46	2,266,338.78
1890	8,824.80	165,037.26	173,862.06	1,364,875.87	583,006.41	2,121,744.34
1891	208,834.63	319,059.47	527,894.10	1,034,210.26	466,650.35	2,028,754.71
1892	304,530.19	264,245.56	568,775.75	1,424,844.29	565,946.88	2,559,566.92
1893	107,386.99	172,069.82	279,456.81	1,470,051.03	542,466.29	2,291,974.13
1894	210,112.94	188,357.45	398,470.39	1,531,630.15	569,473.43	2,499,573.97
1895	168,138.98	316,500.16	484,639.14	1,584,567.00	659,486.03	2,728,692.17
1896	389,631.38	167,073.13	556,704.51	1,663,792.74	812,509.44	3,033,006.69
1897	463,047.40	133,955.42	677,002.82	1,817,218.00	920,942.35	3,415,163.17
1898	288,817.42	295,634.71	584,452.13	1,963,255.18	755,352.51	3,303,059.82
1899	216,971.97	597,492.67	814,464.64	2,063,611.70	774,943.61	3,653,019.95
1900	145,807.71	591,376.10	737,183.81	2,178,597.72	798,877.60	3,714,659.13
1901	110,470.85	596,676.44	707,147.29	2,293,776.36	1,006,420.08	4,007,343.73
1902	308,988.49	416,817.10	725,805.59	2,426,850.45	1,161,491.17	4,314,147.21
1903	499,645.45	622,115.06	1,121,761.41	2,529,177.79	1,347,826.94	4,998,766.14
1904	449,718.40	1,469,857.83	1,919,576.23	2,631,358.47	1,188,575.78	5,739,510.48
1905	552,827.27	450,696.24	1,003,523.51	2,677,000.50	1,031,131.27	4,711,655.34
1906	97,846.63	583,981.80	681,828.43	2,821,314.52	1,059,804.39	4,562,947.34
1907	35,589.50	1,136,615.54	1,172,205.04	2,830,480.58	686,867.32	4,689,552.94
1908	135,106.64	973,312.86	1,108,419.50	2,927,032.08	697,159.64	4,732,611.22

RELATIVE IMPORTANCE OF THE VARIOUS BRANCHES OF EXPENDITURE

	1818-21	1828-31	1840-43	1854-57	1868-71	1883-86	1903-06
GEN'L GOV'T							
Average	\$11,751.17	\$36,745.69	\$50,623.73	\$95,956.29	\$294,232.05	\$616,987.40	\$1,577,274.16
Per cent	7.4	13	8.5	3.5	2.8	4.7	5.4
Per cap.	\$0.27	\$0.60	\$0.51	\$0.59	\$1.17	\$1.58	\$2.67
POLICE							
Average	\$8,992.18	\$11,682.68	\$51,062.98	\$199,237.23	\$580,661.01	\$1,015,841.03	\$1,921,693.78
Per cent	5.6	4.1	8.5	7.0	5.6	7.9	6.6
Per cap.	\$0.21	\$0.19	\$0.52	\$1.24	\$2.32	\$2.60	\$3.25
FIRE							
Average	\$1,837.30	\$17,464.13	\$39,292.66	\$101,559.22	\$406,033.15	\$742,567.00	\$1,356,484.52
Per cent	1.1	6.2	6.6	3.7	4.	5.7	4.6
Per cap.	\$0.04	\$0.28	\$0.40	\$0.63	\$1.62	\$1.90	\$2.29
INSTITUTIONS							
Average	\$25,963.54	\$38,453.99	\$81,965.50	\$243,876.76	\$650,099.22	\$1,093,523.46	\$1,685,989.93
Per cent	16.3	13.6	13.8	9.0	6.3	8.5	5.8
Per cap.	\$0.60	\$0.63	\$0.83	\$1.52	\$2.60	\$2.80	\$2.85
PUBLIC GROUNDS							
Average	\$1,869.61	\$1,915.58	\$4,028.80	\$38,275.19	\$139,261.55	\$731,570.08	\$1,129,549.57
Per cent	1.1	0.7	0.6	1.4	1.3	5.7	3.9
Per cap.	\$0.04	\$0.03	\$0.04	\$0.24	\$0.55	\$1.87	\$1.91
STREETS							
Average	\$31,295.41	\$80,275.36	\$138,436.83	\$914,332.04	\$4,684,103.98	\$3,806,283.34	\$9,409,731.74
Per cent	19.7	28.5	23.2	33.8	45.7	29.5	32.5
Per cap.	\$0.72	\$1.31	\$1.41	\$5.71	\$18.74	\$9.75	\$15.94
LIBRARY							
Average ....	....	....	....	\$89,261.20	\$57,560.82	\$197,054.11	\$330,623.60
Per cent ....	....	....	....	3.3	0.5	1.5	1.1
Per cap. ....	....	....	....	\$0.55	\$0.23	\$0.50	\$0.56
SCHOOLS							
Average	\$41,405.95	\$54,077.47	\$157,279.28	\$382,531.63	\$1,455,799.41	\$1,927,688.72	\$5,003,219.82
Per cent	26	19.2	26	14	14.2	14.9	17.3
Per cap.	\$0.96	\$0.88	\$1.60	\$2.39	\$5.82	\$4.94	\$8.48
WATER							
Average ....	....	....	....	\$351,327.44	\$1,542,921.99	\$1,959,630.57	\$2,886,815.21
Per cent ....	....	....	....	13	15	15.2	9.9
Per cap. ....	....	....	....	\$2.19	\$6.17	\$5.02	\$4.87
COUNTY							
Average	\$26,366.85	\$32,877.85	\$48,773.04	\$186,535.92	\$271,403.18	\$653,452.82	\$1,432,655.58
Per cent	16.5	11.7	7.7	6.9	2.6	5	4.9
Per cap.	\$0.61	\$0.53	\$0.49	\$1.16	\$1.08	\$1.67	\$2.42
RAPID TRANSIT							
Average ....	....	....	....	....	....	....	\$1,730,495.20
Per cent ....	....	....	....	....	....	....	5.9
Per cap. ....	....	....	....	....	....	....	\$2.93
MISCELLANEOUS							
Average	\$9,413.31	\$8,100.19	\$26,094.75	\$101,688.27	\$161,360.69	\$134,107.98	\$454,353.58
Per cent	6	2.8	4.3	3.7	1.6	1.0	1.5
Per cap.	\$0.22	\$0.13	\$0.26	\$0.63	\$0.64	\$0.34	\$0.77
TOTAL	\$158,895.34	\$281,592.97	\$597,557.60	\$2,704,581.23	\$10,243,437.06	\$12,878,706.54	\$28,918,886.71
ESTIMATED							
POPULATION	43,000	61,000	98,000	160,000	250,000	390,000	590,000



APPENDIX II

RECEIPTS, 1818-1859

Year	Taxes	Rents	Interest	Licenses	Special Assessments	Health	Institutions
1818	\$165,638.03	\$19,713.45	.....	\$268.00	.....	.....	.....
1819	159,649.43	18,480.32	\$3,483.02	198.00	.....	.....	\$16,584.10
1820	155,009.56	13,868.51	1,495.53	74.50	.....	.....	5,064.56
1821	.....	.....	.....	.....	.....	.....	.....
1822	159,578.90	15,714.36	370.37	1,594.80	.....	.....	10,433.42
1823	169,887.27	18,104.69	2,042.49	3,247.39	\$5,837.00	.....	11,039.35
1824	219,221.26	19,620.01	1,907.65	1,947.31	4,611.31	\$5,944.09	10,733.23
1825	186,906.16	18,714.09	3,793.58	3,383.50	5,183.80	5,155.32	14,394.55
1826	222,011.71	27,992.61	12,852.69	3,172.50	1,772.05	5,552.88	15,944.57
1827	237,749.14	35,739.47	16,398.72	3,425.84	5,867.91	3,986.06	11,283.07
1828	225,959.27	39,745.15	16,862.90	4,201.50	1,283.67	8,140.92	11,994.60
1829	247,061.93	46,366.44	14,935.93	1,651.25	254.14	6,588.70	14,449.74
1830	253,106.12	32,103.07	15,021.35	2,067.99	1,868.38	5,872.20	17,468.17
1831	249,351.55	34,144.79	10,926.04	1,359.00	111.56	8,497.35	15,195.33
1832	287,611.22	32,554.06	9,704.28	198.00	370.06	4,374.40	14,674.28
1833	312,646.61	35,423.71	10,451.55	2,556.00	18.72	11,373.92	14,651.37
1834	363,955.64	34,714.62	22,636.17	1,953.00	11,918.82	7,485.33	18,110.99
1835	392,264.23	48,888.89	32,309.40	1,834.51	1,535.75	5,618.73	11,856.88
1836	415,716.10	49,318.23	7,045.42	1,801.83	71.00	9,340.69	11,257.03
1837	453,222.31	53,655.10	10,822.20	2,217.33	11,691.70	7,057.61	14,143.07
1838	450,353.62	53,310.71	9,792.17	1,317.52	6,527.00	6,973.39	14,524.15
1839	511,888.66	48,825.57	9,660.65	1,216.21	1,418.41	8,131.56	13,469.70
1840	537,648.10	48,434.86	14,129.70	1,162.36	539.20	6,489.64	14,401.76
1841	597,276.29	53,665.58	10,368.43	1,131.54	4,833.14	8,076.74	45,938.45
1842	606,437.83	54,875.27	8,164.61	2,230.20	2,465.71	10,803.67	45,885.28
1843	695,022.33	53,684.43	8,598.62	1,894.09	2,402.92	8,442.64	48,215.90
1844	722,038.57	54,954.95	10,292.76	1,899.50	5,883.33	9,652.76	43,138.41
1845	766,782.16	49,122.28	15,877.10	1,927.35	6,852.50	11,133.81	35,591.59
1846	873,438.83	62,927.11	35,853.22	4,202.34	16,111.64	14,841.50	39,171.10
1847	969,519.26	59,452.76	24,110.05	7,290.81	9,596.91	14,348.11	38,674.85
1848	1,066,495.72	66,571.65	28,978.83	4,162.96	12,190.69	10,508.12	40,190.73
1849	1,135,493.87	62,913.52	21,053.99	3,434.12	14,245.57	22,365.33	59,529.00
1850	1,242,436.78	76,357.43	19,948.91	8,115.80	12,373.60	19,052.70	62,333.45
1851	1,301,150.09	73,670.34	29,569.23	8,654.48	20,168.94	13,406.70	62,425.27
1852	1,227,678.24	74,404.94	35,762.02	8,596.24	18,500.64	19,132.89	64,324.10
1853	1,546,225.22	76,615.13	82,278.57	8,244.32	28,980.39	20,847.35	70,227.95
1854	1,958,436.19	74,938.81	61,366.58	8,000.64	34,234.91	26,500.74	64,577.57
1855	1,868,226.62	73,316.52	57,329.35	7,524.17	27,313.06	27,308.26	46,008.77
1856	1,931,103.88	77,806.02	49,962.05	7,193.27	15,174.85	26,359.17	49,036.87
1857	2,220,714.62	77,341.18	57,033.01	9,143.53	17,309.35	25,087.88	30,169.21
1858	2,193,414.22	82,883.33	82,550.65	9,233.58	25,422.29	19,287.20	52,219.26
1859	2,475,630.49	94,060.29	73,493.84	10,167.06	18,580.81	16,619.84	33,215.18

RECEIPTS, 1818-1859

School Fund	Water	Sales of Property	Alien Passenger Tax	County of Suffolk	Miscellaneous	Total	Year
.....	.....	\$5,315.48	.....	.....	\$4,388.03	\$195,322.99	1818
.....	.....	6,662.00	.....	.....	413.09	205,469.96	1819
.....	.....	.....	.....	.....	273.50	176,686.16	1820
.....	.....	.....	.....	.....	.....	.....	1821
.....	.....	13,652.00	.....	\$20,000.00	758.57	222,102.42	1822
.....	.....	2,612.02	.....	20,000.00	1,246.19	234,016.40	1823
.....	.....	21,506.00	.....	20,970.00	386.00	306,846.86	1824
.....	.....	19,281.00	.....	20,554.80	194.62	277,561.42	1825
.....	.....	42,148.36	.....	24,250.58	2,902.16	358,600.11	1826
.....	.....	45,407.43	.....	19,731.83	750.41	380,339.88	1827
.....	.....	30,785.00	.....	23,142.84	2,049.75	364,165.60	1828
.....	.....	44,260.81	.....	22,187.25	207.00	386,293.19	1829
.....	.....	20,720.92	.....	22,282.30	10.50	370,521.00	1830
.....	.....	72,489.02	.....	19,594.80	76.57	411,746.01	1831
.....	.....	17,232.21	.....	20,145.77	.....	386,864.28	1832
.....	.....	37,282.24	.....	26,312.55	.....	450,716.67	1833
.....	.....	63,213.30	.....	28,884.15	3,903.56	565,405.38	1834
.....	.....	57,040.69	.....	20,604.67	5,915.18	573,468.93	1835
\$1,523.24	.....	32,650.31	.....	31,136.80	22,140.36	582,001.01	1836
1,995.52	.....	16,764.09	\$4,237.43	27,615.23	145,392.82	648,814.41	1837
.....	.....	18,446.19	1,182.70	35,442.64	6,232.47	604,102.56	1838
2,073.37	.....	14,659.15	2,570.91	38,608.02	13,891.57	666,413.76	1839
2,428.39	.....	15,278.92	2,022.98	23,038.97	8,830.27	675,305.15	1840
3,225.97	.....	18,800.76	5,095.06	22,000.67	8,435.56	778,848.19	1841
2,412.62	.....	12,961.72	4,600.56	20,946.39	20,018.47	791,742.33	1842
2,664.35	.....	96,560.98	2,136.22	16,442.91	7,818.30	942,883.78	1843
.....	.....	118,443.93	5,764.02	24,663.61	7,344.86	1,004,076.70	1844
3,055.64	.....	192,138.18	11,526.39	27,700.19	4,726.62	1,126,433.81	1845
13,048.44	\$22,263.30	171,386.19	21,580.93	31,988.13	5,266.10	1,302,978.92	1846
4,492.37	10,517.54	135,009.77	55,002.65	31,747.70	5,985.19	1,365,747.97	1847
4,142.69	20,624.67	89,863.99	10,370.01	37,761.60	20,675.68	1,412,537.34	1848
3,496.48	153,000.99	65,068.34	8,103.76	54,551.44	13,552.33	1,617,708.74	1849
4,962.39	149,025.09	89,421.34	.....	54,546.05	14,525.14	1,753,098.68	1850
5,219.12	199,426.48	67,076.43	.....	45,156.39	12,344.33	1,838,267.80	1851
5,500.65	203,304.12	194,360.61	.....	49,334.93	19,795.95	1,920,695.33	1852
5,745.85	213,677.67	264,304.29	.....	47,398.11	34,195.81	2,398,741.26	1853
5,808.96	263,158.63	166,668.04	.....	92,858.26	37,316.18	2,793,865.51	1854
5,392.16	291,859.14	194,807.90	.....	125,947.42	31,711.98	2,666,836.25	1855
5,915.58	313,242.65	170,082.01	.....	47,045.86	30,955.12	2,723,877.23	1856
6,136.79	309,628.22	221,109.38	.....	192,508.96	36,589.93	3,202,772.06	1857
6,185.76	354,211.32	316,383.12	.....	87,506.93	29,409.27	3,259,706.93	1858
6,045.90	353,465.37	284,025.67	.....	57,581.78	55,160.55	3,478,045.98	1859

RECEIPTS, 1860-1908

Year	Taxes	Rents	Interest	Licenses	Liquor Licenses	Special Assessments	Health	School Fund
1860	\$2,479,519.34	\$88,774.23	\$70,128.47	\$7,957.62	....	\$25,238.70	\$14,908.34	\$5,926.35
1861	2,382,102.40	88,101.41	55,247.20	5,133.01	....	16,277.37	15,568.25	6,304.99
1862	2,889,938.77	88,635.91	272,703.80	4,747.03	....	14,955.95	12,493.28	6,430.63
1863	3,398,397.83	90,797.51	141,398.25	5,267.62	....	15,165.47	15,866.21	6,750.44
1864	4,487,609.08	97,212.12	109,962.65	5,776.08	....	16,937.17	22,018.31	7,393.81
1865	6,098,150.09	98,168.73	90,502.70	6,491.68	....	18,856.66	20,923.03	8,082.08
1866	5,741,370.26	108,886.76	161,233.81	8,816.88	....	25,912.90	33,020.96	5,310.30
1867	7,145,651.39	117,838.55	175,929.81	14,802.16	....	53,292.56	43,317.90	9,722.96
1868	6,473,645.64	131,784.55	141,735.07	13,147.20	\$108,910.89	104,133.80	40,414.19	8,171.38
1869	7,096,532.24	127,989.76	125,048.91	15,392.34	6,594.13	309,753.70	52,951.24	7,226.79
1870	9,106,481.77	130,922.48	227,213.54	16,798.99	....	450,421.01	53,285.76	12,015.14
1871	8,406,093.72	130,233.06	158,074.85	20,146.20	....	396,770.65	52,690.55	9,963.24
1872	8,171,584.48	134,027.91	153,380.08	20,867.03	....	491,771.23	46,264.76	8,920.19
1873	9,218,020.28	100,710.85	238,751.58	20,636.40	....	359,492.24	31,218.35	8,597.14
1874	12,176,436.08	900,511.00	349,649.97	25,431.20	....	737,215.66	41,911.30	....
1875	11,184,653.82	168,351.76	284,687.56	25,089.64	250,478.00	581,740.91	48,971.24	....
1876	9,964,080.87	155,767.16	211,105.64	27,905.44	173,323.50	614,171.22	59,012.42	....
1877	9,147,654.22	111,704.83	179,726.12	27,470.86	274,866.00	445,483.80	49,677.27	....
1878	8,444,877.87	142,409.36	123,587.36	25,135.70	223,388.00	255,049.07	50,078.61	....
1879	8,046,237.25	130,766.90	156,549.28	25,847.32	242,746.51	133,883.81	36,149.82	....
1880	10,122,664.11	118,858.87	132,314.23	26,659.00	260,900.51	125,364.06	44,533.94	....
1881	9,934,615.27	108,059.33	120,633.50	31,270.26	258,865.00	151,208.84	48,068.24	....
1882	10,654,830.20	110,556.78	153,223.47	32,612.72	282,427.00	175,432.64	55,703.16	....
1883	10,567,575.20	121,330.77	332,619.60	34,725.41	305,555.00	203,493.51	63,338.50	....
1884	12,098,395.07	126,426.96	142,901.55	37,158.23	321,178.00	215,139.95	64,194.46	....
1885	9,592,539.82	120,876.06	113,621.06	37,902.83	511,830.00	228,599.10	56,733.14	....
1886	9,730,597.37	118,398.05	189,705.51	42,006.40	977,247.00	130,317.27	49,528.17	....
1887	10,907,495.16	111,557.89	196,685.71	47,862.66	668,752.27	107,506.51	43,420.05	....
1888	11,102,779.71	111,840.81	243,394.53	51,265.34	299,964.00	193,335.14	46,445.85	....
1889	11,132,836.27	111,557.58	249,488.03	49,814.61	755,968.00	116,546.60	46,809.49	....
1890	11,806,633.05	118,751.34	269,670.72	49,311.21	1,234,215.00	63,554.49	51,208.14	....
1891	11,167,781.54	83,353.76	130,283.24	45,328.98	815,864.00	37,895.06	38,045.69	....
1892	12,733,514.18	109,095.28	242,434.46	49,054.03	1,056,145.00	157,541.61	51,004.92	....
1893	12,596,590.85	110,843.33	213,896.02	48,172.60	1,062,838.00	142,163.13	44,440.67	....
1894	12,868,825.61	111,563.60	413,780.03	48,351.10	1,092,037.00	204,801.60	49,057.91	....
1895	12,951,535.09	109,442.73	544,509.57	53,171.70	1,106,640.00	207,326.70	58,190.03	....
1896	13,411,834.82	107,676.07	426,259.58	56,043.54	1,451,195.00	219,469.93	41,354.02	....
1897	14,062,390.98	113,244.30	385,265.98	55,871.29	1,457,536.00	151,794.03	46,884.18	....
1898	14,734,714.14	112,722.41	166,892.43	58,173.83	1,480,868.00	759,010.11	43,413.61	....
1899	15,622,178.78	106,770.14	690,828.84	56,520.23	1,482,077.00	335,654.94	31,860.99	....
1900	17,755,911.72	110,033.82	299,539.99	58,365.41	1,477,569.00	642,897.97	37,709.52	....
1901	18,541,000.00	114,128.40	147,278.91	57,916.81	1,437,281.00	381,449.36	29,272.16	....
1902	18,797,522.43	131,533.97	399,925.60	62,015.14	1,425,581.74	550,613.74	29,005.29	....
1903	19,161,487.17	129,762.56	161,560.75	63,791.53	1,440,086.72	487,891.16	44,519.01	....
1904	19,094,092.06	127,069.32	233,231.41	68,677.86	1,441,767.12	438,121.61	47,951.39	....
1905	21,455,717.45	127,945.44	179,984.45	75,440.80	1,462,831.70	576,113.52	34,745.58	....
1906	22,003,361.05	126,015.74	225,610.79	87,671.04	1,486,828.19	406,408.25	30,661.09	....
1907	21,537,959.85	131,939.07	217,440.76	92,245.03	1,498,128.46	240,576.08	38,686.52	....
1908	23,669,259.07	131,556.76	544,389.08	112,668.24	1,514,074.70	286,842.01	38,277.41	....

RECEIPTS, 1860-1908

Institutions	Water	Ferry	Rapid Transit	County of Suffolk	Miscellaneous	Sales of Property	Total	Year
\$31,108.61	\$372,290.67	....	....	\$84,007.74	\$25,587.29	\$233,788.99	\$3,439,236.35	1860
32,448.91	380,568.61	....	....	30,418.80	41,505.12	93,075.94	3,146,812.01	1861
91,198.83	400,808.36	....	....	46,791.75	82,315.40	254,298.32	4,165,318.03	1862
292,344.75	434,254.61	....	....	43,158.99	85,934.29	70,998.05	4,600,334.02	1863
359,707.79	463,910.91	....	....	64,984.09	181,740.43	191,193.19	6,008,445.63	1864
361,481.16	472,842.75	....	....	75,198.44	56,866.44	100,654.51	7,408,218.27	1865
268,482.79	530,526.80	....	....	122,930.46	126,574.62	142,775.81	7,275,842.35	1866
303,378.13	550,896.71	....	....	179,152.94	180,264.25	198,233.66	8,972,571.02	1867
265,428.77	609,030.49	....	....	81,070.95	103,924.12	293,873.97	8,375,271.02	1868
241,171.25	649,893.70	....	....	113,569.90	136,333.25	343,007.68	9,825,469.89	1869
235,010.71	782,610.00	\$180,058.54	....	144,899.25	99,194.55	309,414.84	11,838,317.58	1870
226,464.52	841,972.82	184,600.00	....	141,607.34	138,964.54	453,945.71	11,160,854.40	1871
218,936.22	902,022.68	205,000.00	....	137,129.23	142,666.75	363,509.21	10,996,079.77	1872
222,789.40	1,118,598.27	219,507.50	....	156,395.21	261,087.21	346,065.40	12,391,869.83	1873
245,329.00	1,298,380.88	200,000.00	....	133,912.35	117,159.69	479,044.26	16,004,981.39	1874
173,108.41	1,397,162.58	179,300.00	....	100,687.85	113,241.72	442,960.87	14,950,434.36	1875
169,084.90	1,389,568.50	172,963.00	....	106,253.09	114,001.89	452,730.89	13,609,968.52	1876
170,640.47	1,358,901.61	175,795.48	....	96,933.38	122,295.76	258,223.93	12,718,913.73	1877
197,814.00	1,349,180.67	166,530.31	....	62,644.02	85,907.47	244,873.82	11,371,476.26	1878
217,903.85	1,374,347.97	174,437.00	....	71,515.80	63,464.64	105,251.98	10,839,102.13	1879
195,259.54	1,365,721.79	166,508.48	....	62,842.55	108,897.96	262,184.82	12,992,790.86	1880
207,672.69	1,373,514.44	165,513.06	....	83,275.31	75,431.38	448,211.25	13,006,338.57	1881
240,642.62	1,426,237.62	162,827.91	....	90,546.61	76,763.38	211,418.21	13,673,222.32	1882
227,418.66	1,498,048.15	159,031.03	....	94,265.91	81,452.87	401,570.67	14,135,981.37	1883
236,677.16	1,494,152.83	156,801.60	....	91,483.00	84,968.42	166,012.31	15,435,489.54	1884
239,885.58	1,549,016.01	159,558.14	....	127,564.78	135,758.88	32,174.75	13,609,968.05	1885
213,595.83	1,579,578.78	164,497.69	....	125,202.25	77,437.05	128,105.30	13,527,117.57	1886
195,136.81	1,644,751.93	140,001.13	....	157,777.03	80,257.31	98,584.72	14,399,789.19	1887
178,915.07	1,719,473.20	138,760.65	....	210,601.92	113,900.26	246,683.07	14,657,368.55	1888
199,057.90	1,698,601.17	141,633.00	....	307,623.94	101,065.93	105,018.93	15,016,021.54	1889
211,463.36	1,771,087.63	146,276.80	....	205,603.24	121,607.37	87,275.34	16,136,657.69	1890
207,794.30	1,946,156.78	116,353.00	....	134,341.35	81,164.89	192,974.43	14,114,337.02	1891
234,569.78	1,853,728.84	154,660.65	....	162,492.18	161,070.69	333,438.57	17,298,750.19	1892
289,408.47	2,153,937.58	152,069.54	....	179,797.89	545,934.54	67,788.13	17,607,880.75	1893
286,382.51	2,146,888.40	155,502.87	....	223,884.74	229,357.89	53,335.79	17,883,788.14	1894
299,382.41	2,872,969.69	169,584.85	....	192,545.69	148,123.58	156,038.64	18,953,460.77	1895
300,107.93	3,017,894.63	167,056.74	\$18,519.25	212,532.78	233,212.93	41,613.11	19,704,409.33	1896
359,924.18	2,708,546.18	171,454.23	32,284.42	241,497.10	640,633.77	164,850.15	20,656,179.79	1897
348,494.51	7,313,086.74	293,496.15	136,793.34	328,321.84	734,999.93	156,941.27	26,659,828.31	1898
337,833.50	2,291,888.40	112,020.04	206,519.89	295,286.15	1,506,312.23	238,294.57	23,414,045.70	1899
310,761.74	2,551,721.58	166,815.33	211,651.10	271,723.41	835,054.45	185,461.62	24,924,617.66	1900
259,011.65	10,120,936.99	167,879.62	213,503.58	233,814.24	682,897.41	195,999.06	32,582,661.19	1901
267,992.31	2,408,378.02	173,189.88	230,836.65	240,843.66	436,551.25	174,672.51	25,319,662.12	1902
265,821.62	2,668,610.93	177,482.21	218,432.05	424,802.23	416,501.40	503,948.90	26,224,788.24	1903
461,751.78	2,445,222.85	176,198.95	252,187.68	226,992.80	539,339.43	201,564.00	26,651,003.26	1904
393,988.09	2,459,079.81	108,478.09	338,817.73	234,710.27	545,185.91	228,193.17	28,212,232.01	1905
399,253.58	2,531,845.10	104,802.94	383,015.08	245,066.14	1,032,230.83	447,046.97	29,531,816.79	1906
403,254.01	2,626,589.77	105,664.55	412,401.02	238,832.38	589,459.68	308,750.13	28,447,027.31	1907
400,526.27	2,679,073.90	104,289.31	445,317.30	281,613.41	760,524.27	205,997.31	31,174,319.04	1908

RENTS, 1818-1859

Year	Faneuil Hall Market	Other	Total
1818	.....	.....	\$19,713.45
1819	.....	.....	18,480.32
1820	.....	.....	13,868.51
1821	.....	.....	.....
1822	.....	.....	15,714.36
1823	.....	.....	18,104.69
1824	.....	.....	19,620.01
1825	.....	.....	18,714.09
1826	\$20,271.39	\$7,721.22	27,992.61
1827	26,355.89	9,383.58	35,739.47
1828	26,460.84	13,284.31	39,745.15
1829	24,956.71	9,679.73	34,636.44
1830	23,591.64	8,511.43	32,103.07
1831	25,002.95	9,141.84	34,144.79
1832	22,825.56	9,728.50	32,554.06
1833	24,438.95	10,984.76	35,423.71
1834	23,212.08	23,062.54	46,274.62
1835	24,959.27	23,929.62	48,888.89
1836	25,869.34	23,448.89	49,318.23
1837	25,579.13	28,075.97	53,655.10
1838	24,694.95	28,615.76	53,310.71
1839	23,429.99	25,395.58	48,825.57
1840	24,008.36	24,426.50	48,434.86
1841	25,078.63	28,586.95	53,665.58
1842	25,122.75	29,172.52	54,875.27
1843	25,135.92	28,548.51	53,684.43
1844	25,096.20	29,858.75	54,954.95
1845	24,857.06	24,264.32	49,122.28
1846	29,522.18	33,404.93	62,927.11
1847	29,867.15	29,585.61	59,452.76
1848	31,262.36	35,309.29	66,571.65
1849	31,148.55	31,764.97	62,913.52
1850	41,786.69	34,570.74	76,357.43
1851	40,398.42	33,271.92	73,670.34
1852	44,755.39	29,649.35	74,404.94
1853	49,671.18	26,943.95	76,615.13
1854	49,731.42	25,207.39	74,938.81
1855	49,674.05	23,641.87	73,316.52
1856	53,411.95	24,394.07	77,806.02
1857	54,031.07	23,310.11	77,341.18
1858	55,462.95	28,420.38	83,883.33
1859	54,248.27	39,812.02	94,060.29

INSTITUTIONS, 1841-1859

Year	Houses of Industry and Reformation	House of Correction	Lunatic Hospital	Overseers of the Poor	Total
1841	\$14,707.74	\$19,089.22	\$7,443.22	\$4,698.27	\$45,938.45
1842	16,768.11	13,946.63	8,491.17	6,679.37	45,885.28
1843	16,624.18	14,207.28	9,721.99	7,662.54	48,215.99
1844	15,637.20	10,772.12	9,384.28	7,344.81	43,138.41
1845	15,064.28	8,848.66	10,220.52	1,458.13	35,591.59
1846	17,852.22	10,410.51	10,073.37	835.00	39,171.10
1847	17,252.46	7,196.35	10,531.11	3,694.93	38,674.85
1848	14,993.38	6,739.09	13,568.70	4,889.56	40,190.73
1849	29,057.29	11,053.98	16,678.73	2,739.00	59,529.00
1850	27,684.37	14,274.66	16,174.46	4,199.96	62,333.45
1851	25,028.19	17,870.48	17,346.86	2,179.74	62,425.27
1852	24,536.81	17,482.71	19,967.39	2,337.19	64,324.10
1853	24,260.69	23,558.08	19,983.74	2,425.44	70,227.95
1854	14,082.01	26,630.01	21,179.94	2,685.61	64,577.57
1855	5,637.27	20,978.69	18,538.25	944.56	46,098.77
1856	4,660.46	21,718.41	17,465.77	5,192.93	49,036.87
1857	2,416.73	24,369.67	....	3,382.81	30,169.21
1858	1,731.92	24,851.37	22,913.61	2,722.36	52,219.26
1859	2,122.61	24,658.89	4,313.60	2,120.10	33,215.18

COUNTY OF SUFFOLK, 1822-1859

Year	Balance of Costs	Fines, Fees, Etc.	Other	Total
1822	.....	.....	.....	\$15,665.82
1823	.....	.....	.....	19,580.96
1824	\$6,574.62	\$9,197.99	\$5,197.39	20,970.00
1825	7,186.31	7,979.87	5,388.62	20,554.80
1826	4,243.92	10,145.10	9,861.56	24,250.58
1827	6,628.67	8,176.43	4,926.73	19,731.83
1828	7,841.10	8,827.89	6,473.85	23,142.84
1829	6,914.95	8,656.32	6,615.98	22,187.25
1830	8,667.22	6,775.88	6,839.20	22,282.30
1831	9,456.22	5,559.04	4,579.54	19,594.80
1832	8,259.74	8,456.21	3,429.82	20,145.77
1833	13,653.82	10,699.81	1,958.92	26,312.55
1834	15,720.60	9,115.65	4,047.90	28,884.15
1835	8,885.86	9,711.96	2,006.85	20,604.67
1836	20,676.62	7,927.69	2,532.49	31,136.80
1837	13,709.85	10,595.20	3,310.18	27,615.23
1838	.....	.....	.....	35,442.64
1839	25,865.31	8,638.50	4,104.21	38,608.02
1840	12,948.66	9,685.49	404.82	23,038.97
1841	12,674.71	9,149.83	176.13	22,000.67
1842	6,757.68	14,097.95	90.76	20,946.39
1843	3,812.19	12,581.01	49.71	16,442.91
1844	6,868.75	17,741.10	53.76	24,663.61
1845	6,876.90	20,823.29	.....	27,700.19
1846	8,764.64	22,004.50	1,218.99	31,988.13
1847	3,307.77	27,966.08	473.85	31,747.70
1848	6,314.82	30,705.87	740.91	37,761.60
1849	15,672.43	37,980.18	898.83	54,551.44
1850	14,203.46	36,430.16	3,912.43	54,546.05
1851	3,208.86	41,704.94	242.59	45,156.39
1852	21,985.93	27,201.21	147.79	49,334.93
1853	21,573.56	25,747.51	77.04	47,398.11
1854	48,858.02	43,801.60	198.64	92,858.26
1855	78,187.21	40,669.97	1,090.24	125,947.42
1856	.....	43,745.41	3,300.45	47,045.86
1857	146,599.36	43,626.56	2,283.04	192,508.96
1858	45,814.54	39,764.87	1,927.52	87,506.93
1859	29,829.40	26,406.63	1,345.75	57,581.78

RELATIVE IMPORTANCE OF THE VARIOUS BRANCHES OF RECEIPTS

	1818-20	1828-31	1840-43	1854-57	1868-71	1883-86	1903-06
TAXES							
Average	\$160,399.00	\$243,869.72	\$609,096.14	\$1,979,620.33	\$7,920,688.34	\$10,497,276.88	\$20,653,398.18
Per cent	83	64	77	69	76	74.8	74.6
RENTS							
Average	\$17,354.09	\$35,157.36	\$52,665.03	\$75,850.63	\$130,229.96	\$121,758.18	\$127,698.26
Per cent	9	9	6	2.7	1.2	0.8	0.5
INTEREST							
Average	\$1,659.51	\$14,436.58	\$10,300.34	\$56,422.74	\$163,018.89	\$194,711.93	\$197,846.85
Per cent	1	4	1	2	1.5	1.4	0.7
LICENSES							
Average	\$180.16	\$2,319.93	\$1,604.55	\$7,965.40	\$16,371.18	\$38,173.21	\$73,895.30
Per cent	0.1	0.6	0.2	0.3	0.1	0.3	0.2
LIQUOR LICENSES							
Average ....	....	....	....	....	\$28,876.25	\$578,951.50	\$1,457,878.43
Per cent ....	....	....	....	....	0.2	4.1	5.2
SPECIAL ASSESSMENTS							
Average ....	....	\$879.43	\$2,560.24	\$23,508.27	\$315,251.04	\$205,777.45	\$477,156.13
Per cent ....	....	0.2	0.3	1	3	1.4	1.7
HEALTH							
Average ....	....	\$7,274.79	\$8,453.17	\$26,314.01	\$49,835.43	\$58,448.56	\$39,469.27
Per cent ....	....	2	1	1	0.5	0.4	0.1
INSTITUTIONS							
Average	\$7,216.22	\$14,776.96	\$38,610.37	\$47,470.60	\$242,018.81	\$229,394.30	\$380,203.77
Per cent	4	4	5	2	2.3	1.6	1.4
SCHOOL FUND							
Average ....	....	....	\$2,682.83	\$5,813.37	\$9,104.13	....	....
Per cent ....	....	....	0.3	0.2	0.1	....	....
WATER							
Average ....	....	....	....	\$294,472.16	\$720,876.75	\$1,530,198.94	\$2,531,189.67
Per cent ....	....	....	....	10	7	10.9	9.1
ALIEN PASSENGER TAX							
Average ....	....	....	\$3,438.70	....	....	....	....
Per cent ....	....	....	0.4	....	....	....	....
COUNTY OF SUFFOLK							
Average ....	....	\$21,801.79	\$20,607.23	\$114,590.12	\$120,286.86	\$109,628.98	\$282,742.86
Per cent ....	....	6	3	4	1.1	0.7	1.1
FERRY							
Average ....	....	....	....	....	\$91,164.63	\$159,972.11	\$141,740.54
Per cent ....	....	....	....	....	0.9	1.1	0.5
SALES OF PROPERTY							
Average	\$3,992.49	\$42,063.93	\$35,900.59	\$188,166.83	\$372,560.55	\$206,965.75	\$360,188.26
Per cent	2	10	4	6.5	3.7	1.4	1.3
RAPID TRANSIT							
Average ....	....	....	....	....	....	....	\$298,113.13
Per cent ....	....	....	....	....	....	....	1.1
MISCELLANEOUS							
Average	\$1,691.54	\$600.95	\$11,275.65	\$34,143.30	\$119,605.36	\$94,004.30	\$633,439.39
Per cent	1	0.2	1.5	1	1.1	0.6	2.3
TOTAL							
Average	\$192,493.03	\$383,181.45	\$797,194.86	\$2,854,337.76	\$10,299,978.22	\$14,026,162.15	\$27,654,960.07

VALUATION, TAX RATE, AND POLLS

(VALUATION IN THOUSANDS OF DOLLARS)

Year	Total Valuation	Real Estate	Personal Estate	Rate of Taxation	* Ratable Polls	Population
1822	\$42,140	\$23,364	\$18,775	\$3.65	8,800	43,298 ¹
1823	44,896	25,367	19,529	3.50	9,855	....
1824	49,843	27,303	22,540	4.25	10,897	....
1825	52,442	30,992	21,450	3.50	11,660	58,277
1826	59,449	34,203	25,246	3.50	12,602	....
1827	65,858	36,001	29,797	3.50	12,442	....
1828	61,523	35,908	25,615	3.55	12,535	....
1829	61,068	36,953	24,114	3.95	13,495	....
1830	59,586	36,900	22,626	4.05	13,096	61,392
1831	60,698	37,675	23,023	3.95	13,618	....
1832	67,514	39,145	28,369	4.10	14,184	....
1833	70,477	40,966	29,510	4.25	14,899	....
1834	74,805	43,140	31,665	4.70	15,137	....
1835	79,342	47,552	31,789	4.85	16,188	78,603
1836	88,265	53,370	34,895	4.75	16,719	....
1837	89,583	56,311	33,272	5.00	17,182	....
1838	90,231	57,372	32,859	4.90	15,615	....
1839	91,826	58,577	33,248	5.65	16,561	....
1840	94,581	60,424	34,157	5.50	17,966	93,383
1841	98,006	61,963	36,043	6.00	18,915	....
1842	106,723	65,499	41,223	5.70	19,636	....
1843	110,046	67,673	42,372	6.20	20,063	....
1844	118,450	72,048	46,402	6.00	22,339	....
1845	135,948	81,991	53,957	5.70	24,287	114,366
1846	148,839	90,119	58,720	6.00	25,974	....
1847	162,360	97,764	64,595	6.00	27,008	....
1848	167,728	100,403	67,324	6.50	27,726	....
1849	174,180	102,827	71,352	6.50	28,363	....
1850	180,000	105,093	74,907	6.80	28,018	136,881
1851	187,947	109,358	78,588	7.00	28,445	....
1852	187,680	110,699	76,980	6.40	28,983	....
1853	206,514	116,000	90,423	7.60	29,959	....
1854	227,013	127,730	99,283	9.20	31,130	....
1855	241,932	136,351	105,580	7.70	31,602	160,490
1856	249,162	143,681	105,480	8.00	32,974	....
1857	258,111	149,713	108,398	9.30	33,162	....
1858	254,714	153,505	101,208	8.60	32,621	....
1859	263,420	158,410	105,018	9.70	33,456	....
1860	276,861	163,891	112,969	9.30	34,449	177,840
1861	275,760	167,682	108,078	8.90	35,161	....
1862	276,217	163,638	112,579	10.50	34,159	....
1863	302,507	169,624	132,882	11.50	33,618	....
1864	332,449	182,072	150,377	13.30	32,832	....
1865	371,892	201,628	170,263	15.80	34,704	192,318
1866	415,362	225,767	189,595	13.00	34,192	....
1867	444,946	250,587	194,358	15.50	35,772	....
1868	493,573	287,635	205,937	12.30	48,416	....
1869	549,511	332,051	217,459	13.70	51,195	....
1870	584,089	365,593	218,496	15.30	56,926	250,526

¹ 1829.

VALUATION, TAX RATE, AND POLLS (Continued)

(VALUATION IN THOUSANDS OF DOLLARS)

Year	Total Valuation	Real Estate	Personal Estate	Rate of Taxation	Ratable Polls	Population
1871	612,633	395,214	217,448	13.10	61,148	....
1872	682,724	443,283	239,440	11.70	67,221	....
1873	693,831	470,086	223,745	12.80	70,199	....
1874	798,755	554,200	244,554	15.60	84,684	....
1875	793,991	558,941	235,020	13.70	85,086	341,919
1876	748,996	526,157	222,838	12.70	81,364	....
1877	686,840	481,407	205,433	13.10	86,007	....
1878	630,446	440,375	190,070	12.80	85,913	....
1879	613,322	428,777	184,545	12.50	89,452	....
1880	639,462	437,370	202,092	15.20	93,769	362,839
1881	665,554	455,388	210,165	13.90	99,407	....
1882	672,497	467,704	204,793	15.10	102,594	....
1883	682,432	478,318	204,113	14.50	107,286	....
1884	682,656	488,130	194,526	17.00	110,481	....
1885	685,579	495,973	189,605	12.80	112,104	390,393
1886	710,621	517,593	193,118	12.70	112,446	....
1887	747,642	547,171	200,471	13.40	115,603	....
1888	764,452	563,013	201,439	13.40	120,529	....
1889	795,433	593,799	201,633	12.90	123,335	....
1890	822,041	619,990	202,051	13.30	125,906	448,477
1891	855,069	650,238	204,831	12.60	132,809	....
1892	893,975	680,279	213,695	12.90	136,375	....
1893	924,093	707,762	216,331	12.80	139,757	....
1894	928,109	723,743	204,365	12.80	139,789	....
1895	951,367	744,751	206,616	12.80	142,460	496,920
1896	981,269	770,261	211,008	12.90	148,477	....
1897	1,012,582	803,860	208,721	13.00	154,654	....
1898	1,036,099	830,233	205,865	13.60	157,590	....
1899	1,089,736	866,809	222,926	13.10	161,401	....
1900	1,129,175	902,490	226,685	14.70	166,354	560,892
1901	1,152,505	925,937	227,468	14.90	171,650	....
1902	1,191,274	957,496	233,777	14.80	171,516	....
1903	1,220,457	985,560	234,897	14.80	178,905	....
1904	1,236,953	1,006,122	230,830	15.20	181,437	....
1905	1,259,745	1,021,431	238,314	16.00	183,359	595,380
1906	1,289,705	1,044,892	244,813	15.90	183,404	....
1907	1,313,471	1,070,864	242,606	15.90	184,983	....
1908	1,327,662	1,082,405	245,257	16.50	187,566	....

CONDITION OF CITY DEBT
(IN THOUSANDS OF DOLLARS)

	Gross Funded	Sinking Funds, Etc.	Net Funded	Unfunded	Net Funded and Unfunded	Increase or Decrease Net Funded	Increase or Decrease Net Funded and Unfunded
April 30, 1822	71	....	71	....	....	....	....
May 31, 1823	103	3	100	....	....	29	....
" 1824	207	3	203	....	....	103	....
" 1825	305	....	305	....	....	102	....
April 30, 1826	304	145	218	....	....	— 87	....
" 1827	1,011	209	712	....	....	494	....
" 1828	949	279	670	....	....	— 42	....
" 1829	911	267	644	....	....	— 26	....
" 1830	801	228	663	....	....	19	....
" 1831	880	234	646	....	....	— 17	....
" 1832	817	175	641	....	....	— 5	....
" 1833	940	164	775	....	....	134	....
" 1834	1,078	153	924	....	....	149	....
" 1835	1,147	102	1,045	....	....	121	....
" 1836	1,264	182	1,082	....	....	37	....
" 1837	1,497	217	1,279	....	....	197	....
" 1838	1,491	97	1,393	....	....	114	....
" 1839	1,506	93	1,502	....	....	109	....
" 1840	1,608	171	1,526	....	....	24	....
" 1841	1,663	90	1,573	....	....	47	....
" 1842	1,594	88	1,505	....	....	— 68	....
" 1843	1,518	134	1,384	....	....	— 121	....
" 1844	1,423	302	1,121	....	....	— 263	....
" 1845	1,163	378	784	....	....	— 337	....
" 1846	1,153	717	436	....	....	— 348	....
" 1847	1,206	800	495	....	....	59	....
" 1848	3,452	478	2,974	....	....	2,479	....
" 1849	5,334	388	4,946	....	....	2,467	....
" 1850	6,195	310	5,884	....	....	938	....
" 1851	6,801	473	6,327	....	....	443	....
" 1852	7,110	489	6,621	....	....	294	....
" 1853	7,859	872	6,986	....	....	365	....
" 1854	7,799	1,411	6,387	....	....	— 599	....
" 1855	7,151	1,042	6,108	....	....	— 279	....
" 1856	7,107	1,088	6,018	....	....	— 90	....
" 1857	7,259	1,054	6,204	....	....	186	....
" 1858	8,101	1,108	6,993	....	....	789	....
" 1859	8,954	1,331	7,623	....	....	630	....
" 1860	8,491	967	7,524	44	7,568	— 99	....
" 1861	8,894	988	7,905	50	7,955	381	387
" 1862	9,031	851	8,179	63	8,242	274	287
" 1863	10,335	1,190	9,144	184	9,328	965	1,086
" 1864	11,015	1,463	9,552	233	9,785	408	457
" 1865	11,371	1,621	9,750	125	9,875	198	90
" 1866	11,892	3,039	8,852	287	9,139	— 868	— 736
" 1867	12,998	4,440	8,558	22	8,580	— 394	— 559
" 1868	14,011	5,199	8,812	135	8,947	254	367
" 1869	16,959	6,869	10,089	344	10,433	1,277	1,486

CONDITION OF CITY DEBT (Continued)

(IN THOUSANDS OF DOLLARS)

	Gross Funded	Sinking Funds, Etc.	Net Funded	Unfunded	Net Funded and Unfunded	Increase or Decrease Net Funded	Increase or Decrease Net Funded and Unfunded
April 30, 1870	18,687	9,215	9,471	3,131	12,602	— 618	2,160
" 1871	26,472	11,632	14,839	193	15,032	5,368	2,430
" 1872	28,628	12,849	15,779	197	15,976	940	944
" 1873	30,553	13,926	16,626	1,288	17,914	847	1,938
" 1874	42,890	15,417	27,473	246	27,719	10,847	9,805
" 1875	43,414	16,218	27,196	97	27,293	— 277	— 426
" 1876	43,848	16,880	26,968	84	27,052	— 228	— 241
" 1877	43,590	16,109	27,480	....	27,480	512	428
" 1878	42,457	16,297	26,159	....	26,159	—1,321	—1,321
" 1879	42,359	16,130	26,229	....	26,229	70	70
" 1880	42,030	14,188	27,842	....	27,842	1,613	1,613
" 1881	40,949	14,943	26,005	....	26,005	—1,837	—1,837
" 1882	40,079	15,901	24,177	84	24,261	—1,828	—1,744
" 1883	41,184	16,422	24,761	97	24,858	584	597
" 1884	43,185	16,933	26,252	92	26,344	1,491	1,486
" 1885	42,962	18,305	24,596	....	24,596	—1,656	—1,748
" 1886	43,628	18,915	24,712	....	24,712	116	116
" 1887	46,799	20,312	26,487	....	26,487	1,775	1,775
" 1888	48,993	21,632	27,361	....	....	874	....
" 1889	49,920	22,266	27,654	....	....	293	....
" 1890	53,930	22,854	31,075	....	....	3,421	....
" 1891	55,861	24,519	31,342	....	....	267	....
Jan. 31, 1892	56,003	25,569	30,434	....	....	— 908	....
" 1893	56,908	25,999	30,908	....	....	474	....
" 1894	54,418	20,908	33,509	....	....	2,601	....
" 1895	59,337	22,206	37,131	....	....	3,622	....
" 1896	65,666	24,973	40,693	....	....	3,562	....
" 1897	71,902	26,023	45,879	....	....	5,186	....
" 1898	79,592	28,110	51,482	....	....	5,603	....
" 1899	82,938	28,716	54,222	....	....	2,740	....
" 1900	86,996	28,663	58,333	....	....	4,111	....
" 1901	81,629	30,243	51,385	....	....	—6,948	....
" 1902	79,953	32,801	47,152	....	....	—4,233	....
" 1903	84,886	30,798	54,088	....	....	6,936	....
" 1904	88,149	29,932	58,216	....	....	4,128	....
" 1905	94,121	31,694	62,427	....	....	4,211	....
" 1906	99,213	32,679	66,533	....	....	4,106	....
" 1907	101,449	32,628	68,821	....	....	2,288	....
" 1908	104,207	33,425	70,781	....	....	1,960	....
" 1909	108,487	36,450	72,036	....	....	1,255	....

GROSS FUNDED DEBT
(IN THOUSANDS OF DOLLARS)

NET FUNDED DEBT
(IN THOUSANDS OF DOLLARS)

Year	City Proper	Water	Consolidated	City Proper	Water	Total
April 30, 1848	\$1,323	\$2,129	\$3,452	\$845	\$2,129	\$2,974
" 1849	1,547	3,787	5,334	1,159	3,787	4,946
" 1850	1,731	4,463	6,194	1,421	4,463	5,884
" 1851	1,845	4,955	6,800	1,372	4,955	6,327
" 1852	1,901	5,209	7,110	1,412	5,209	6,621
" 1853	1,886	5,973	7,859	1,013	5,973	6,986
" 1854	2,367	5,432	7,799	955	5,432	6,387
" 1855	1,747	5,404	7,151	704	5,404	6,108
" 1856	1,876	5,231	7,107	787	5,231	6,018
" 1857	2,227	5,032	7,259	1,172	5,032	6,204
" 1858	3,376	4,725	8,101	2,268	4,725	6,993
" 1859	4,200	4,754	8,954	2,869	4,754	7,623
" 1860	4,645	3,846	8,491	3,678	3,846	7,524

BONDS AND NOTES HELD BY CITY

First Day of Fiscal Year	Amount	First Day of Fiscal Year	Amount	First Day of Fiscal Year	Amount
1825	\$93,618.35	1837	\$192,966.45	1849	\$276,006.20
1826	111,634.74	1838	182,274.36	1850	221,789.09
1827	300,296.38	1839	177,048.17	1851	448,412.00
1828	281,593.20	1840	171,277.65	1852	477,552.67
1829	267,505.76	1841	88,006.93	1853	872,674.15
1830	228,028.30	1842	78,977.73	1854	795,256.18
1831	234,095.70	1843	69,284.74	1855	661,059.44
1832	175,734.75	1844	120,667.06	1856	608,811.05
1833	164,605.22	1845	259,527.89	1857	540,722.98
1834	157,636.46	1846	455,014.63	1858	531,118.84
1835	105,715.00	1847	436,904.49	1859	436,748.01
1836	84,279.12	1848	358,287.45	1860	519,226.03

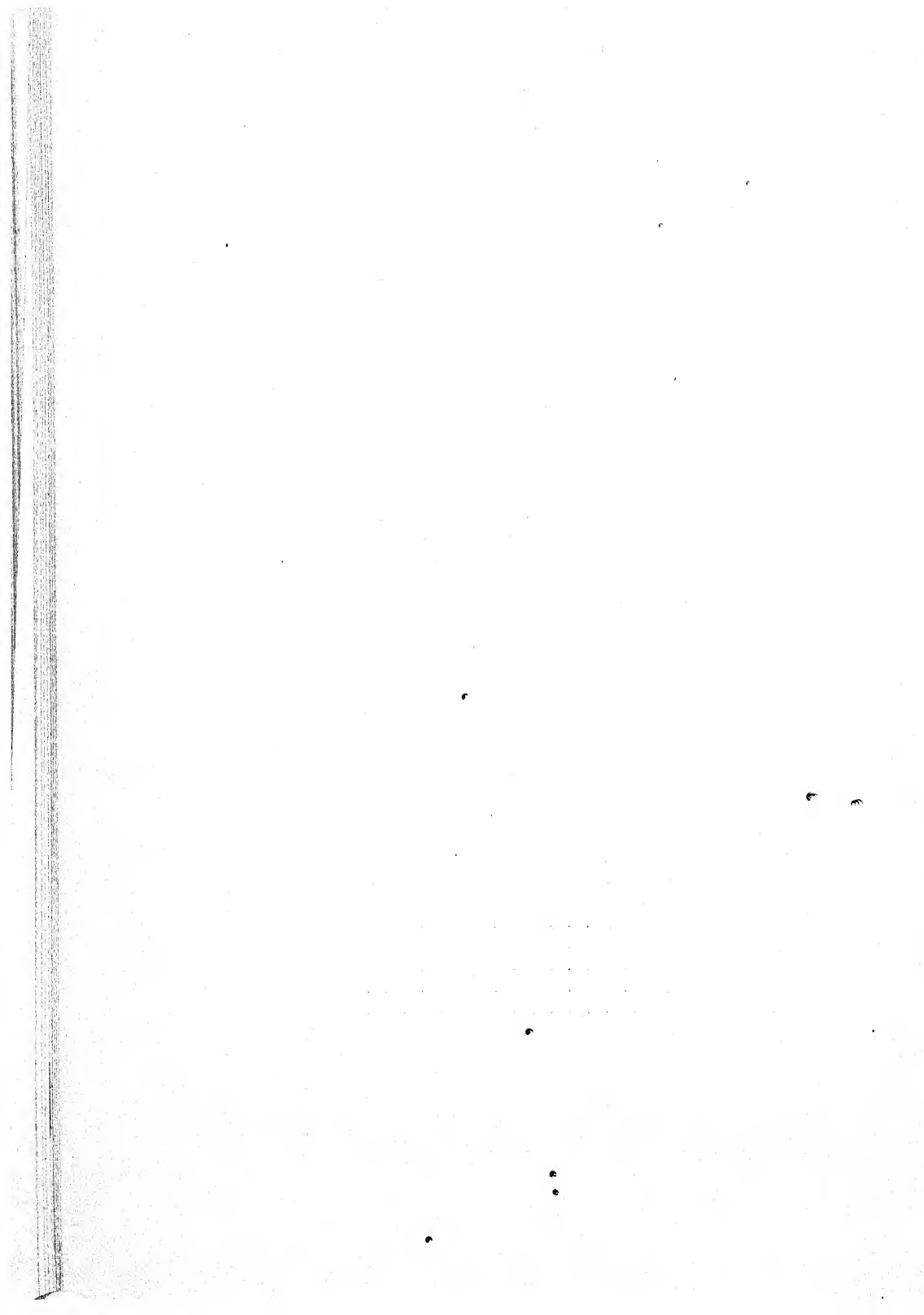
SALES OF LAND

Year	Number of Feet Sold	Amount Received	Year	Number of Feet Sold	Amount Received
1837	26,855	\$7,930.50	1849 ¹	.....	.....
1838	55,367	14,472.37	1850	269,000	\$45,046.77
1839	17,823	8,668.50	1851	119,100	77,016.01
1840	2,430	841.50	1852	36,087	19,789.17
1841	5,734	7,760.15	1853	154,674	78,859.50
1842	10,876	6,605.75	1854	149,897	81,669.41
1843	86,568	93,876.49	1855	450,321	153,502.00
1844	261,499	128,124.30	1856	434,205	147,381.43
1845	662,867	401,667.84	1857	735,644	208,686.90
1846	472,319	348,787.02	1858	277,126	215,530.54
1847	23,274	15,081.15	1859	171,134	125,326.71
1848	5,302	5,170.88			

¹ Figures not given.

MAYORS OF THE CITY OF BOSTON, 1822-1908

John Phillips	1822
Josiah Quincy	1823-28
Harrison Gray Otis	1829-31
Charles Wells	1832-33
Theodore Lyman, Jr.	1834-35
Samuel T. Armstrong	1836
Samuel A. Eliot	1837-39
Jonathan Chapman	1840-42
Martin Brimmer	1843-44
Thomas A. Davis	1845
Josiah Quincy, Jr.	1846-48
John P. Bigelow	1849-51
Benjamin Seaver	1852-53
Jerome V. C. Smith	1854-55
Alexander H. Rice	1856-57
Frederick W. Lincoln, Jr.	1858-60
Joseph M. Wightman	1861-62
Frederick W. Lincoln, Jr.	1863-66
Otis Norcross	1867
Nathaniel B. Shurtleff	1868-70
William Gaston	1871-72
Henry L. Pierce	1873
Samuel C. Cobb	1874-76
Frederick O. Prince	1877
Henry L. Pierce	1878
Frederick O. Prince	1879-81
Samuel A. Green	1882
Albert Palmer	1883
Augustus P. Martin	1884
Hugh O'Brien	1885-88
Thomas N. Hart	1889-90
Nathan Matthews, Jr.	1891-94
Edwin U. Curtis	1895
Josiah Quincy	1896-99
Thomas N. Hart	1900-01
Patrick A. Collins	1902-05
John F. Fitzgerald	1906-07
George A. Hibbard	1908-09

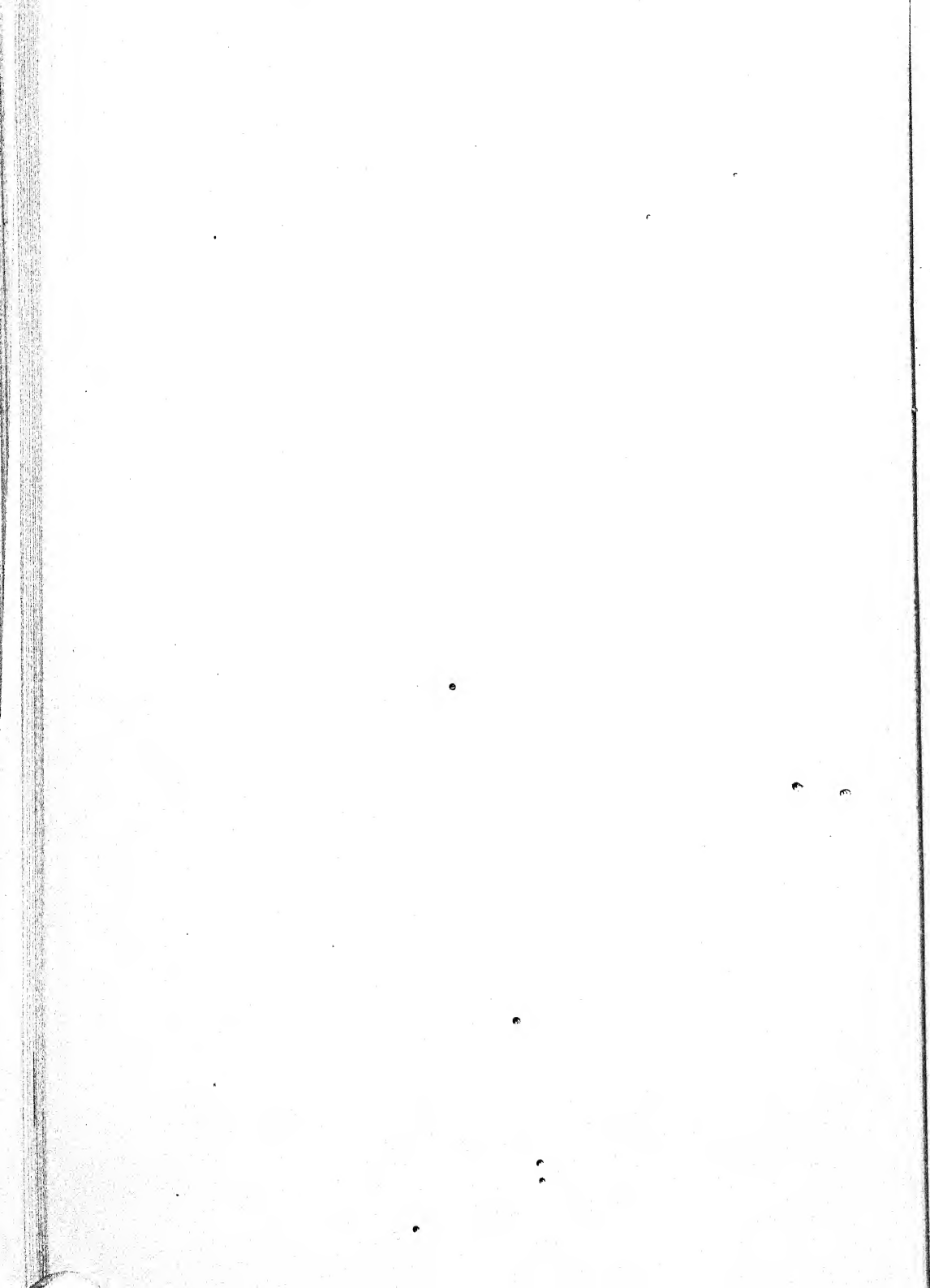


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